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Report of Local Public Health Resources

1949

FEDERAL SECURITY AGENCY
PUBLIC HEALTH SERVICE

PUBLIC HEALTH PERSONNEL, FACILITIES, AND SERVICES IN LOCAL AREAS

Analysis of information
submitted to the
Public Health Service
in
Report of Public Health Personnel, Facilities, and Services,
as of June 30, 1949

Prepared by
Clifford H. Greve, Chief, Analysis and Reports Section
Josephine Campbell, Methods Examiner

Division of State Grants
PUBLIC HEALTH SERVICE

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INTRODUCTION

The extension of full-time public health organization and the expansion of existing health programs at the local level of government are among the primary problems facing the nation today. Protection of the health of the citizenry through full-time local health units is not only of vital interest to local governments but to State governments and the Federal government as well. Generally, the establishment and maintenance of well-staffed local health departments requires financial assistance over and above local fiscal resources. State health departments play an important role in aiding local areas through grants of money, assignment of personnel, and provision of supplies and equipment. Such assistance to local health units is financed from State appropriations and from grants-in-aid received from the Federal government for the promotion and extension of health services at State and local levels of government.

Annually since 1946, health jurisdictions rendering local health services under the direction of a full-time health officer and receiving State or Federal assistance, either in cash or services, have completed the "Report of Public Health Personnel, Facilities, and Services." Reported data include the number and types of personnel engaged in local health activities, the facilities available, and the services provided in each component subdivision of the reporting health jurisdiction. This information is supplied for three types of organizations operating within the health jurisdictions, namely, official health agencies, other official agencies, and voluntary agencies.

Similar data on local public health activities are not available from any other source on a nation-wide basis. Knowledge of current resources throughout the country for local health work is essential to health administrators in planning for complete coverage of the nation with full-time local health departments and the improvement of existing local public health services. The reported data point up deficiencies in basic organization, personnel, health facilities, and limitations in the scope of services.

This pamphlet, the third in a series of analyses, is designed to highlight the most significant data contained in the "Report of Public Health Personnel, Facilities, and Services" submitted for the fiscal year ending June 30, 1949. Previous analyses summarized data for the fiscal years 1946 and 1947.[1] A published analysis of information reported for the fiscal year 1948 was not made, but tabular compilations of the data for that year are available upon request.

The current analysis of reported data is presented in four sections: (1) Extent of Coverage; (2) Full-Time Personnel in Local Areas; (3) Full-Time Personnel of Various Types Related to Minimum Staffing Requirements; and (4) Availability of Facilities and Services.

1/ The first pamphlet--Public Health Resources in Local Health Jurisdictions Administered by a Full-Time Health Officer--was based on reports for fiscal year ending June 30, 1946, and was published in January 1948. The second pamphlet--Public Health Personnel, Facilities, and Services in Local Areas having a Full-Time Health Officer--was based on reports for fiscal year ending June 30, 1947, and was published June 1949.

EXTENT OF COVERAGE

The Report of Public Health Personnel, Facilities, and Services was received for the fiscal year 1949 from 1,242 organizations providing full-time local health service in 47 States and the District of Columbia. No reports were submitted by Vermont since this State has no full-time local health organizations.

Reports are required from all full-time units receiving State or Federal aid. In addition, a few local health units not receiving assistance voluntarily submitted the report. This analysis includes data from both sources. Information from full-time units with the position of health officer temporarily vacant has also been included.

Data available to the Public Health Service for fiscal year 1949 (see the Appendix) indicate there were 49 full-time local health units which did not prepare this report. These units consisted of 10 State health districts in Pennsylvania and 39 other units throughout the country which did not receive assistance from State or Federal governments.

Prior to 1948, data for all State health districts were included in the analysis regardless of whether the district was organized primarily for actual local service or for only supervisory and advisory service. Since 1948, however, information reported by State health districts operating as administrative units--those providing supervision and consultation for the most part--was excluded from all tabulations. Health districts of this type were operated in 1949 by State health departments of New Jersey, Georgia, Missouri, Iowa, New Hampshire, Massachusetts, and Wisconsin. They numbered about 50 units and served approximately 360 counties, in which resided an estimated 10 million people. Data for counties and cities geographically located within such districts but which have separate full-time local health departments are included in this analysis.

Population Estimates

Since population estimates for local units of government were not readily available, and data supplied by local health officers were based on a wide variety of methods of estimate, it was impossible to use locally prepared population data in the analysis of this report. In order to have uniformity in population data, it was decided to compile the population estimates for all local units.

The estimates used in this analysis were prepared by determining the percentage gain or loss in population for each State between the Census of April 1, 1940, and the estimated population of the State as of July 1, 1948, as prepared by the Bureau of the Census. This percentage gain or loss was applied uniformly to all reporting local areas within each State. The resulting estimated populations generally represent an overstatement of rural population because of the movement toward the cities which occurred during the war years. On the other hand, they represent an understatement of urban population. This bias does not materially affect the purposes for which these data are used in this report since urban areas more frequently have health departments than do rural areas. Therefore, use of these estimates to determine total population served by local health units represents an understatement of total coverage.

Areas With Full-Time Local Health Service

The 1,242 local health jurisdictions which submitted reports served 1,636 counties having an estimated population of approximately 108 million people or about 74 percent of the estimated total population of 146 million.[2] There are four major classifications of health organizations. These include single county units, local health districts, city health units, and State health districts organized to provide actual local services. The health departments classified as single county units serve only one county, but include city-county units. In some instances, all cities within the county are served by the county health unit, while in others there are cities which have independent health departments and do not receive service from the county. Units classified as local health districts serve two or more counties or other type of local government which are formally organized as a single operating unit with control vested in local authority and directed by a single full-time health officer. City health departments serve only a single city. Some States have organized district health departments, with control vested in the State, for the primary purpose of providing direct local service. These units operate as substitutes for locally administered health units, and are classified as "State health districts (actual service)."

The general organizational pattern of local government influences the plan of health organization. The following table indicates that slightly more than half the reporting units were of the single county type. An additional 22 percent were local health districts; approximately 20 percent were city health departments, and less than 5 percent were State health districts rendering direct local services. It is noted that 26 percent of the total population of the country resided in areas without full-time local health service or, if organized, reports were not received from these areas. City health departments provided services to about 31 percent of the population, while single county units covered only 27 percent of the people. Local and State health districts rendered direct local services to about 16 percent of the total population of the country.

2/ Bureau of Census estimate, July 1, 1948, exclusive of armed forces overseas. Current Population Reports, Series P-25, No. 26, dated August 5, 1949.

Table 1.--Number of Full-Time Health Organizations of Different Types and Population Represented in Each Type
June 30, 1949

Type of health department organization	Health units		Estimated U.S. population[1]	
	Number	Percent	Number	Percent
Total	1,242	100.0	146,112,000	100.0
No health unit reporting	-	-	38,329,000	26.2
Single county	667	53.7	39,042,700	26.7
Local health district	276	22.2	14,228,500	9.8
City	242	19.5	44,986,100	30.8
State health district (actual service)	57	4.6	9,525,700	6.5

[1] Population based on 1940 Census population of local areas adjusted for percentage of increase or decrease in State population as estimated for July 1, 1948, by the Bureau of the Census in Current Population Reports, Series P-25, No. 26, dated August 5, 1949.

Local health departments should serve a sufficient population to enable them to utilize fully a staff of highly technical and specialized personnel. For this reason, it is rather generally agreed that a full-time local health unit should serve at least 35,000 persons and preferably 50,000 for an efficient and economical operation. Obviously, the attainment of this goal will necessitate the development of more units of the local district type. Under this type of organization, contiguous communities--usually too small in population to operate a health department effectively--have combined their resources and established an organized framework for at least minimum full-time public health protection.

The population of local areas served by the 1,242 reporting units averaged slightly more than 86,000 persons per unit. More than half the units, however, had a population of less than 50,000 (see table 2). Forty-five percent of single county units and 35 percent of city units had populations of less than 35,000 persons. Although many local health districts comprised three or more counties, over half these districts had a population of less than 50,000. City units and State health districts rendering local services accounted for 59 percent of the units having a population in excess of 100,000 persons.

The percentage of the population covered by some type of full-time local health organization varied considerably among the States. No local health departments were reported in Vermont and only 2.2 percent of the

Table 2.--Distribution of Health Organizations of Different Types According to Designated Population-Size Groups[1]
June 30, 1949

Population group	Total organizations		Number of each designated type reporting			
	Number	Percent	County	Local health district	City	State health district
Total	1,242	100.0	667	276	242	57
Less than 35,000	457	36.8	303	69	84	1
35,000 - 50,000	252	20.3	136	79	34	3
50,000 - 100,000	337	27.1	153	122	52	10
100,000 - 250,000	140	11.3	62	6	39	33
250,000 - 500,000	37	3.0	10	-	17	10
500,000 and over	19	1.5	3	-	16	-

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[1] Population based on 1940 Census population of local areas adjusted for percentage of increase or decrease in State population as estimated for July 1, 1948, by the Bureau of the Census in Current Population Reports, Series P-25, No. 26 dated August 5, 1949.

population of Iowa[3] was served by units rendering local services. On the other hand, 100 percent of the population in 10 States and the District of Columbia was covered by full-time local health services. These completely covered areas served an estimated 35,853,000 people or 24.5 percent of the total population of the country. Fourteen States had coverage of more than 75 but less than 100 percent of their total population. Eight States had between 50 and 75 percent of their population served by full-time health units while eight additional States had more than 25 but less than 50 percent of their populations covered. Seven States had less than 25 percent of their population residing within areas served by reporting health units.

Table 3.--Percent of Population in Each State Covered by Full-Time Health Organizations, Arranged in Percentage Groups, and Total Population Represented in Each Group
June 30, 1949

Percent of total State population covered	Number of States	Estimated U.S. population[1]	
		Thousands	Percent
Total	49	146,112.0	100.0
None	1	363.0	0.2
1 - 24	7	8,623.0	5.9
25 - 49	8	20,858.0	14.3
50 - 74	8	32,709.0	22.4
75 - 99	14	47,706.0	32.7
100	11	35,853.0	24.5

[1] Refer to footnote 1, table 2, preceding page.

These data indicate the need for expansion and extension of local health services to be one of the major problems facing the nation today. Approximately half the States have less than three-fourths of their population covered by full-time local health units according to reports submitted to the Public Health Service.

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[3] Iowa is primarily covered by State health districts of the administrative or supervisory type.

Table 4, page 7, shows the percent of the total estimated population of each State which resided in areas reporting organized full-time local health services. The table also shows the number of counties served in each State as compared to the total number of counties.

Areas in the country having some type of organization providing full-time local health services are shown in figure 1, page 8. It is readily apparent from this map that certain sections of the country have made little progress in organizing locally directed health services. Greatest need for expanding the coverage of full-time local health units lies in the Rocky Mountain area, the Middle West, and the Southwest.

Table 4.--Population of Reporting Areas in Each State Having Full-Time Local Health Service, Number of Health Organizations Represented, and Number of Counties Included

June 30, 1949

State	Total Population	Areas reporting				Total counties
		Population	Percent of total population	Number of health organizations	Number of counties included	
Total	146,112,000[1]	107,783,000[2]	73.8	1,242	1,636[3]	3,069
Alabama	2,901,000	2,901,000	100.0	55	67	67
Arizona	704,000	481,100	68.3	6	6	14
Arkansas	1,937,000	1,747,800	90.2	27	65	75
California	10,354,000	9,888,900	95.5	48	38	58
Colorado	1,199,000	780,300	65.1	9	21	63
Connecticut	1,989,000	815,200	41.0	11	-	8
Delaware	300,000	300,000	100.0	4	3	3
District of Columbia	863,000	863,000	100.0	1	-	-
Florida	2,430,000	2,360,200	97.1	37	62	67
Georgia	3,167,000	2,378,800	75.1	50	87	159
Idaho	586,000	279,700	47.7	5	15	44
Illinois	8,348,000	8,348,000	100.0	39	102	102
Indiana	3,917,000	893,000	22.8	6	4	92
Iowa	2,612,000	58,500	2.2	2	2	99
Kansas	1,895,000	735,800	38.8	14	14	105
Kentucky	2,856,000	2,655,200	93.0	62	104	120
Louisiana	2,591,000	2,506,200	96.7	54	57	64
Maine	898,000	898,000	100.0	11	16	16
Maryland	2,155,000	2,155,000	100.0	24	23	23
Massachusetts	4,638,000	3,347,900	72.2	53	1	14
Michigan	6,216,000	5,695,700	91.6	55	71	83
Minnesota	2,934,000	2,934,000	100.0	15	87	87
Mississippi	2,114,000	2,041,500	96.6	67	77	82
Missouri	3,892,000	2,141,100	55.0	28	22	114
Montana	511,000	114,600	22.4	5	5	56
Nebraska	1,283,000	422,500	32.9	5	6	93
Nevada	164,000	24,400	14.9	1	1	17
New Hampshire	523,000	82,600	15.8	1	-	10
New Jersey	4,768,000	2,453,600	51.5	53	-	21
New Mexico	571,000	571,000	100.0	10	31	32
New York	14,231,000	14,231,000	100.0	38	62	62
North Carolina	3,798,000	3,787,700	99.7	74	99	100
North Dakota	582,000	179,600	30.9	4	17	53
Ohio	7,842,000	5,423,800	69.2	58	51	88
Oklahoma	2,295,000	1,591,900	69.4	29	41	77
Oregon	1,639,000	1,444,000	88.1	19	23	36
Pennsylvania	10,478,000	2,984,000	28.5	4	2	67
Rhode Island	745,000	325,500	43.7	5	5	5
South Carolina	1,982,000	1,982,000	100.0	35	46	46
South Dakota	611,000	77,400	12.7	2	2	68
Tennessee	3,179,000	2,775,800	87.3	61	81	95
Texas	7,371,000	3,984,100	54.1	47	56	254
Utah	670,000	670,000	100.0	6	29	29
Vermont*	363,000	*	*	*	*	14
Virginia	3,051,000	2,504,000	82.1	44	70	100
Washington	2,463,000	2,198,100	89.2	20	23	39
West Virginia	1,911,000	1,471,400	77.0	23	38	55
Wisconsin	3,300,000	1,239,900	37.6	14	3	71
Wyoming	285,000	38,200	13.4	1	1	23

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[1] Bureau of Census estimate, July 1, 1948, exclusive of armed forces overseas. Current Population Reports, Series P-25, No. 26, dated August 5, 1949.

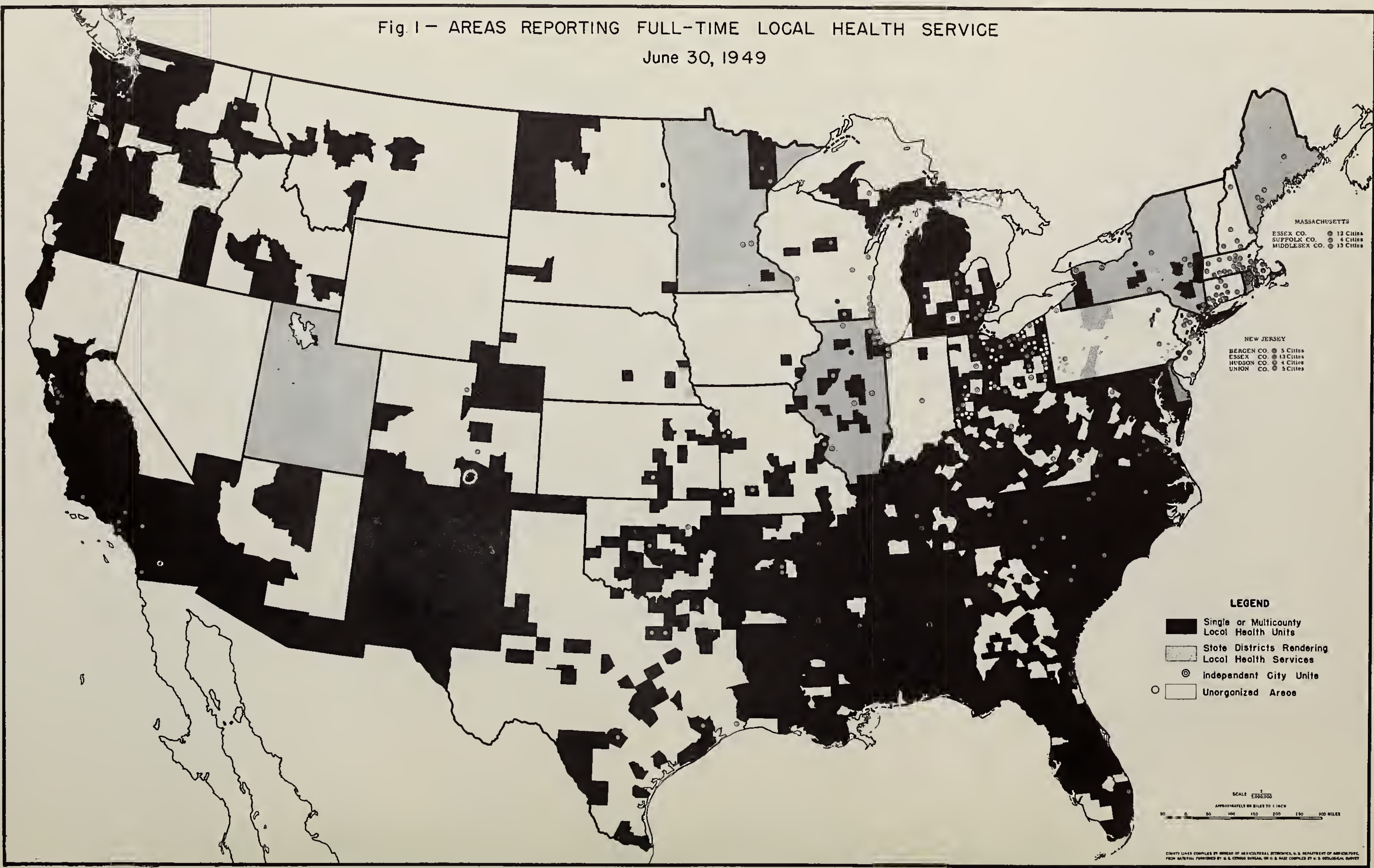
[2] Based on 1940 Census population of local areas adjusted for percentage of increase or decrease in State population as estimated for July 1, 1948, by the Bureau of the Census.

[3] Includes 9 counties which are served by city health departments, the county and city being conterminous. The cities involved are: San Francisco, Denver, New Orleans, New York (5 counties), and Philadelphia.

* Vermont has no full-time health organizations rendering local health service.

Fig. 1 – AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE

June 30, 1949


MASSACHUSETTS
ESSEX CO. ◎ 12 Cities
SUFFOLK CO. ◎ 4 Cities
MIDDLESEX CO. ◎ 13 Cities
NEW JERSEY
BERGEN CO. ◎ 5 Cities
ESSEX CO. ◎ 13 Cities
HUDSON CO. ◎ 4 Cities
UNION CO. ◎ 5 Cities
LEGEND
■ Single or Multicounty Local Health Units
▨ State Districts Rendering Local Health Services
◎ Independent City Units
○ ☐ Unorganized Areas
SCALE 1/5,000,000
APPROXIMATELY 80 MILES TO 1 INCH
50 0 50 100 150 200 250 300 MILES
COUNTY LINES COMPILED BY BUREAU OF AGRICULTURAL ECONOMICS, U. S. DEPARTMENT OF AGRICULTURE, FROM MATERIAL FURNISHED BY U. S. CENSUS BUREAU, ON U. S. BASE COMPILED BY U. S. GEOLOGICAL SURVEY

FULL-TIME PERSONNEL IN LOCAL AREAS

There were 39,840 full-time public health workers employed by official health agencies and by other official agencies engaged in some type of public health work in reporting areas having full-time local health organization as of June 30, 1949. This count also includes public health nurses of voluntary agencies whose services were contracted for by official agencies. Other employees of voluntary agencies have not been included since it is known that information on voluntary agency personnel supplied by many reporting health jurisdictions is incomplete. The reports did not include health personnel of institutions, hospitals, industrial establishments, and public utilities rendering service of a public health nature. Personnel employed by official health agencies and those performing health services under the administration of other official agencies are discussed separately.

Personnel of Official Health Agencies

More than 80 percent (32,343) of all full-time personnel were employees of reporting official health agencies, which essentially are health departments. Local health organizations in seven States accounted for 50 percent of the aggregate; these organizations served only 47 percent of the population covered by full-time health units. Table 5, page 12, summarizes by State the number of persons of each classification employed on a full-time basis.

Differences in the extent of reported coverage for the years in which reports have been received make it impossible to determine the net increase in personnel engaged in local health services. For 1949, a larger number of workers was reported for all categories of professional personnel than was reported for any previous year. Since the number of health units reporting was larger than in previous years, this increase in the number of personnel employed cannot be construed to indicate that staffing shortages in local health organizations are diminishing appreciably.

Full-time local health departments employed nearly 1,600 public health physicians as of June 30, 1949. Four States accounted for more than one-third of this number. One State had no full-time public health physician serving in its local health organizations, while in some other States only one local unit had a full-time public health physician.

Table 5 indicates that official health agencies employed 10,615 public health nurses, including those whose services were contracted from voluntary agencies. A total of 6,667 workers were performing sanitation activities under the direction of official health agencies. Of this number, only 313 were graduate engineers; 1,551 were graduate sanitarians or veterinarians. The remaining 4,803 were nongraduate sanitation personnel. Fourteen States showed no graduate engineers employed by full-time local health agencies.

Of the professional categories, personnel growth was most prominently indicated for health educators, nutritionists, and dentists. Reports from local health units in several States still indicate that no dentists, health educators, nutritionists, or medical social workers are employed by the official health agency. Nation-wide, there were only 220 health educators employed in 34 States by official health agencies rendering local health service; 104 medical social workers in 23 States; and 79 nutritionists in 19 States. Local health departments in two States accounted for 42 of the 79 full-time nutritionists, while units in 13 States employed the 43 physical therapists.

Psychiatrists, psychiatric nurses, and psychiatric social workers were reported under physicians, nurses, and medical social workers, respectively. Among health department workers reported as "other personnel" and identified were: 241 clinic nurses; 237 dental hygienists; 222 venereal disease investigators; and 198 X-ray technicians. Dental hygienists were employed by units in 19 States, but 70 percent of the total number employed were reported in the local areas of a single State--New York.

Personnel Employed in Official Agencies Other Than Health Agencies

A summarization of public health personnel employed full time by other official agencies performing local public health services is set forth in table 6, page 13. The 7,497 other official agency employees represented about 19 percent of the total number of full-time local public health workers employed by tax-supported agencies.

Three States--California, New York, and Pennsylvania--were responsible for 50 percent of the personnel included in table 6. In two States--Delaware and Pennsylvania--persons employed by agencies other than health exceeded the number of health department employees reported.

More than half the employees in other official agencies were public health nurses; local school boards employed a substantial portion of these nurses. The proportion of public health workers employed by other official agencies varied considerably by class of personnel. More health educators, nutritionists, and physical therapists were employed by other agencies than by health departments. For example, 71 percent of the health educators serving local areas were employed by an official agency other than the health agency.

Distribution of Health Agency Personnel by Type of Organization

Table 7, page 14, indicates the personnel reported by the four different types of local health organizations. Of the 32,343 health agency personnel reported, 53 percent were city health department employees; these cities served slightly more than 40 percent of the total population covered by reporting health jurisdictions. For individual classes of personnel, the proportion employed by each type of organization varied. A higher percentage of physicians, graduate engineers, and graduate sanitarians and veterinarians served in non-urban areas, while 72 percent of the nutritionists, 69 percent of the laboratory workers, and 57 percent of the dentists were employed by city health departments.

According to population of areas covered by the various types of organizations, single county health departments had the highest ratio of physicians and graduate sanitarians and veterinarians; State health districts the highest ratio of graduate engineers and physical therapists; and city health departments the highest ratio of all remaining classes specified, namely: nurses, other sanitation personnel, clerks, dentists, laboratory personnel, health educators, nutritionists, medical social workers, as well as "other personnel."

These data indicate that the more specialized type of personnel cannot be effectively and efficiently utilized unless local health units are serving an appreciable population with a comprehensive and, to some extent, specialized health program. In areas with a limited generalized program, it is the public health physician, the nurses, the sanitarians, and clerks that form the basic staff which provide the health services. A number of specialized and technical services, such as technical sanitary engineering and laboratory services, are frequently provided by the State health department staff.

Table 5.--Number of Full-Time Personnel of Different Classifications Employed by Official Health Agencies in Local Areas with Full-Time Health Organization
June 30, 1949

State	Total	Public health physicians	Public health nurses	Sanitation personnel			Clerks	Public health dentists	Laboratory personnel	Health educators	Nutri-tionists	Medical social workers	Physical therapists	All others
				Graduate engineers	Graduate sanitarians and veterin-arians	Other								
Total	32,343	1,587	10,615	313	1,551	4,803	6,962	214	1,369	220	79	104	43	4,483
Alabama	671	41	189	4	34	127	153	3	25	3	1	2	-	89
Arizona	103	4	28	-	4	24	19	-	1	-	-	-	-	23
Arkansas	252	12	80	-	2	48	83	-	2	1	1	-	-	23
California	3,348	192	916	16	372	440	754	17	133	35	11	21	7	434
Colorado	278	16	115	4	33	42	48	1	8	2	-	2	1	6
Connecticut	216	18	74	3	8	30	51	1	12	1	-	1	-	17
Delaware	54	6	33	-	-	-	7	1	3	-	-	-	1	3
Dist. of Columbia	676	31	145	2	10	84	163	9	23	3	1	27	3	175
Florida	842	52	279	7	53	152	158	5	13	2	1	1	-	119
Georgia	975	42	340	27	82	129	175	12	20	2	3	4	-	139
Idaho	59	2	29	-	9	1	10	-	3	-	-	-	-	5
Illinois	1,576	71	442	25	13	179	245	37	107	12	5	-	2	438
Indiana	271	10	83	3	9	56	49	1	11	2	-	1	-	46
Iowa	6	-	3	-	1	1	1	-	-	-	-	-	-	-
Kansas	215	13	82	2	19	35	44	1	5	1	-	1	-	12
Kentucky	619	33	204	1	2	125	186	2	15	1	-	-	-	50
Louisiana	671	31	169	1	35	117	180	3	8	3	1	4	-	119
Maine	107	9	62	1	-	13	19	-	2	-	-	-	-	1
Maryland	936	41	380	3	72	71	229	3	51	3	1	9	5	68
Massachusetts	985	34	373	1	8	209	144	26	45	9	7	2	2	125
Michigan	1,603	85	670	27	71	232	322	16	77	14	5	1	2	81
Minnesota	432	13	183	13	7	64	124	-	9	3	-	1	-	15
Mississippi	519	44	171	1	62	35	130	-	7	7	-	-	-	62
Missouri	619	22	125	18	36	157	166	8	21	1	-	1	-	64
Montana	30	1	14	-	1	4	6	1	1	-	-	-	-	2
Nebraska	134	4	51	3	11	21	29	-	11	2	-	-	2	-
Nevada	9	1	2	-	-	2	2	-	-	-	-	-	-	2
New Hampshire	29	1	17	-	-	5	3	-	1	-	-	-	-	2
New Jersey	852	5	275	-	3	210	135	-	44	1	1	-	-	178
New Mexico	145	13	62	1	3	14	42	-	2	-	-	-	-	8
New York	6,027	177	2,096	58	71	637	1,436	32	368	49	31	11	13	1,048
North Carolina	933	63	348	12	58	121	191	5	29	17	2	-	-	87
North Dakota	54	2	27	2	12	-	6	1	1	1	-	-	-	2
Ohio	1,524	109	543	7	79	313	314	6	42	6	3	1	2	99
Oklahoma	328	25	108	2	23	61	65	-	14	-	-	-	-	30
Oregon	304	23	102	-	24	41	59	-	6	2	-	-	-	47
Pennsylvania	1,039	101	278	17	17	175	254	1	53	4	2	1	-	136
Rhode Island	65	3	27	-	1	4	9	6	1	-	-	-	2	12
South Carolina	605	33	185	7	16	103	121	1	13	7	-	2	-	117
South Dakota	28	1	8	1	-	5	4	-	3	-	-	-	-	6
Tennessee	547	35	219	7	53	60	120	3	-	6	1	-	-	43
Texas	1,183	50	235	13	87	282	242	3	62	7	-	4	-	198
Utah	157	2	81	-	7	38	21	-	5	-	-	-	-	3
Vermont*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Virginia	939	53	245	12	25	141	183	4	39	3	-	3	1	230
Washington	646	28	229	3	76	80	119	1	35	5	1	2	-	67
West Virginia	234	13	85	7	25	23	56	-	4	1	-	2	-	18
Wisconsin	489	21	199	2	15	91	84	4	34	4	1	-	-	34
Wyoming	9	1	4	-	2	1	1	-	-	-	-	-	-	-

* Vermont has no full-time health organizations rendering local health service.

Table 6.--Number of Full-Time Public Health Workers of Different Classifications Employed by Other Official Agencies Rendering Some Type of Health Service in Local Areas with Full-Time Health Organization
June 30, 1949

State	Total	Public health physicians	Public health nurses	Sanitation personnel			Clerks	Public health dantists	Laboratory personnel	Health educators	Nutri-tionists	Medical social workers	Physical therapists	All others
				Graduate anginaars	Graduata sanitarians and veterin-arians	Othar								
Total	7,497	313	4,106	103	57	332	566	130	327	531	118	98	61	755
Alabama	4	-	3	-	-	-	-	-	-	-	-	-	-	1
Arizona	56	1	54	-	-	-	-	-	-	-	-	-	-	1
Arkansas	15	-	7	-	-	-	1	-	-	1	-	-	-	6
California	1,658	125	939	29	27	18	143	43	25	29	10	47	22	201
Colorado	54	-	50	-	-	-	1	-	-	1	-	1	-	1
Connecticut	92	3	22	22	-	17	3	-	-	3	1	1	1	19
Delaware	57	-	40	-	4	5	5	-	3	-	-	-	-	-
Dist. of Columbia	28	-	28	-	-	-	-	-	-	-	-	-	-	-
Florida	52	3	19	-	1	-	6	-	12	-	-	3	2	6
Georgia	18	-	2	2	-	3	4	1	-	1	1	3	-	1
Idaho	5	-	5	-	-	-	-	-	-	-	-	-	-	-
Illinois	601	25	365	-	3	158	32	3	6	2	1	2	-	4
Indiana	114	3	46	-	-	-	2	3	-	50	2	-	1	7
Iowa	6	-	3	-	-	-	1	1	-	-	-	-	-	1
Kansas	51	-	46	-	-	1	-	-	-	-	1	-	-	3
Kentucky	32	-	12	-	-	-	9	-	1	2	-	-	-	8
Louisiana	17	-	3	-	1	1	2	-	-	2	4	-	-	4
Maine	34	-	28	-	-	6	-	-	-	-	-	-	-	-
Maryland	57	1	31	8	1	-	4	-	5	1	1	2	-	3
Massachusetts	226	5	157	7	-	14	11	-	5	15	5	1	-	6
Michigan	231	14	121	2	-	18	24	15	15	3	1	2	3	13
Minnesota	232	4	189	3	-	2	14	-	6	1	1	-	2	10
Mississippi	33	1	3	-	-	-	9	-	-	-	-	1	1	18
Missouri	219	12	134	17	-	50	2	1	-	1	1	-	-	1
Montana	11	2	-	-	3	-	1	-	-	-	-	2	-	3
Nebraska	45	-	32	-	-	-	9	1	-	1	1	-	-	1
Nevada	3	-	-	-	-	-	-	-	-	-	-	-	-	3
New Hampshire	4	-	3	-	-	1	-	-	-	-	-	-	-	-
New Jersey	344	2	340	-	-	-	-	2	-	-	-	-	-	-
New Mexico	35	-	27	-	5	2	-	-	-	-	-	1	-	-
New York	1,114	27	741	5	6	1	23	11	225	14	7	4	8	42
North Carolina	11	-	3	-	1	1	4	-	-	-	-	1	-	1
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	303	10	113	2	-	1	61	10	8	22	5	7	4	60
Oklahoma	53	11	17	-	3	1	6	-	5	1	1	1	3	4
Oregon	63	12	14	2	1	1	21	2	3	-	3	4	-	-
Pennsylvania	1,050	35	187	2	-	9	124	30	7	357	57	1	7	234
Rhode Island	21	-	19	-	-	-	1	-	-	-	1	-	-	-
South Carolina	54	1	13	-	-	13	4	2	1	-	-	1	-	19
South Dakota	3	-	2	-	-	-	1	-	-	-	-	-	-	-
Tennessee	23	-	6	-	-	-	-	-	-	1	1	1	-	14
Texas	200	6	139	1	-	3	17	2	-	7	2	9	1	13
Utah	8	-	4	-	-	4	-	-	-	-	-	-	-	-
Vermont*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Virginia	104	7	63	-	-	-	10	3	-	5	3	1	-	12
Washington	89	-	33	-	1	1	9	-	-	10	4	2	5	24
West Virginia	54	2	35	1	-	1	2	-	-	-	4	-	-	9
Wisconsin	9	-	5	-	-	-	-	-	-	1	-	-	1	2
Wyoming	4	1	3	-	-	-	-	-	-	-	-	-	-	-

* Vermont has no full-time health organizations rendering local health service.

Table 7.--Number of Personnel of Different Classifications Employed Full Time by Official Full-Time Health Organizations of Designated Types

June 30, 1949

Type of personnel	Total	Number of personnel by type of organization			
		County health departments	Local health districts	City health departments	State health districts (Actual service)
Total	32.343	10,704	3,013	17,323	1,303
Public health physicians	1,587	658	200	673	56
Public health nurses	10,615	3,775	1,142	5,057	641
Sanitation personnel:					
Graduate engineers	313	129	41	94	49
Graduate sanitarians and veterinarians	1,551	775	157	591	28
Other	4,803	1,443	379	2,868	113
Clerks	6,962	2,246	790	3,599	327
Public health dentists	214	77	8	121	8
Laboratory personnel	1,369	363	36	950	20
Health educators	220	81	19	118	2
Nutritionists	79	17	3	57	2
Medical social workers	104	42	3	59	-
Physical therapists	43	20	-	12	11
Other personnel	4,483	1,078	235	3,124	46

FULL-TIME PERSONNEL OF VARIOUS TYPES RELATED TO MINIMUM STAFFING REQUIREMENTS

With the public's intensified interest in personal and community health, demands for expanded local health services have increased. It is quite evident from data available to the Public Health Service that progress in strengthening existing basic services or in extending the scope of services beyond those termed as basic essentials, is seriously hampered by the lack of trained public health workers.

The amount of public health protection which is available to the people living in areas having full-time health organization is dependent to a large extent on the number of full-time employees on the staff of the official health agency. Unfortunately, large numbers of health departments have been unable to recruit and retain qualified public health personnel, such as physicians, nurses, sanitarians, and clerks, in sufficient numbers to render all of the minimum basic public health services to residents of the areas which they serve. Some concept of the magnitude of this problem may be gained by relating the availability of full-time workers to the population served by reporting health jurisdictions. As a guide in determining whether localities had sufficient staff members to provide the basic minimum health services, the accepted minimum staffing requirements as developed by the American Public Health Association, Committee on Administrative Practice, Subcommittee on Local Health Units, were used. These requirements were basically as follows:

1 public health physician for every 50,000 persons (or one for every local health unit, whichever is less),
1 public health nurse for every 5,000 persons,
1 sanitary engineer or sanitarian for every 25,000 persons,
1 clerk for every 15,000 persons.

Published data on personnel availability for prior years are not strictly comparable to 1949 data although the same staffing requirements were used. Previously, computations were made on the basis of personnel employed by both official health and other official agencies rendering public health services. Only official health agency personnel were taken into consideration in computing the personnel availability figures included in this report. In many areas the health agency staff is supplemented by workers of other tax-supported agencies, and sometimes by personnel of voluntary agencies. However, since responsibility for the comprehensive local health program rests with the basic official health agency of the community, only workers reported as serving under the administrative direction and technical guidance of the health authority were included in the study. These workers have the primary responsibility for carrying out the continuing health program of the locality.

Computations were not made on a State basis; rather the health agency personnel reported in the individual categories in each full-time city and each full-time county health unit and in each component part of a district health unit were related to the population of the respective area. On this basis, areas with more than the minimum number of personnel recommended did not compensate for areas with fewer personnel than recommended.

Nationally, the personnel picture for adequate local health services leaves much to be desired (see figure 2, page 21). According to information as of June 30, 1949, submitted by the 1,242 full-time health departments, only 2.0 percent of our 146 million persons lived in areas covered by health organizations which had sufficient physicians, nurses, sanitation workers, and clerks to meet the minimum staffing requirements recommended as necessary to provide basic services. Since the reported coverage in 1949 represented approximately 97 percent of the total population having full-time local health service, the situation in the reporting areas is considered representative of all areas served by full-time local health units. On the basis of information collected for 1947 from part-time local health organizations, personnel data from these organizations would not materially change the national percentage of the population having sufficient personnel to meet minimum requirements in all four classes or in any one class.

Except for nurses, the staffing picture was somewhat better for individual types of personnel than in previous years. Local areas were noticeably deficient in nursing personnel. Slightly less than four percent of the nation's population resided in areas having the prescribed number of public health nurses. Most areas had some public health nurses but the number employed did not approximate the ratio to population recommended as essential for basic nursing services. Staffing with respect to sanitation personnel was far better than for other types of basic personnel. More than 55 percent of the people in the United States resided in areas meeting minimum staff needs with respect to sanitation workers. These workers included engineers, sanitarians, veterinarians, and other sanitation personnel. Slightly more than 38 percent of the population had sufficient clerical employees to meet minimum staffing requirements. Almost 24 percent of the population was served by local health units having sufficient physicians to meet minimum requirements.

The proportion of the nation's population with the recommended minimum number of full-time personnel of each class and the number of counties and cities, as well as the population served by such units, are summarized in table 8, page 17. Only 65 of the 1,636 counties reported as having full-time health organization and eight of the 237[4/] full-time city health departments fully met minimum staffing requirements. More than half the 65 counties were located in four States--Florida, Georgia, Maryland, and Virginia. The eight cities were located in eight States.

[4/] The existing difference of five cities between the 242 city health departments shown in table 2, page 4, and the count of 237 city health departments mentioned here results from the fact that city health departments conterminous with a county or with counties have been considered as counties and included in the county count throughout the data presented in this section.

Table 8.--Percent of Total U. S. Population Residing in Areas Reporting Sufficient Full-Time Health Agency Personnel of Designated Classes to Meet Minimum Staffing Requirements[1], Number of Counties and Cities with Sufficient Personnel, and Population Represented
June 30, 1949

Class of personnel	Percent of U. S. population with sufficient personnel	Number of counties and cities with sufficient personnel and population represented		
		Counties	Cities	Estimated population[2]
All four classes	2.0	65	8	2,893,500
Nurses	3.7	148	25	5,463,400
Physicians	23.8	769	80	34,718,100
Clerks	38.3	774	103	55,996,800
Sanitation personnel	55.4	956	192	80,947,600

[1] Refer to page 15 for recommended minimum staffing requirements.
[2] Refer to footnote 1, table 1, page 3.

Further analysis was made of the personnel situation in reported counties and full-time city health units reporting. Table 9, on the following page, details for each of the four classes of personnel considered, the number and percent of the counties and of the cities which had sufficient personnel, some personnel but not enough, and no personnel.

Generally, counties were better staffed with physicians and clerks than were cities. Conversely, cities were better staffed with sanitation personnel and nurses than were counties. In the instance of physicians, 47 percent of the counties had sufficient medical personnel to meet minimum requirements, whereas only 34 percent of the cities had enough personnel of this type. Eighty-one percent of the cities employed the recommended minimum number of sanitation personnel, whereas only 58 percent of the counties had sufficient workers of this category.

Table 9.--Relationship to Recommended Minimum Staffing Requirements[1] of Full-Time Health Agency Personnel Employed in Reported Counties and Cities June 30, 1949

Class of personnel	Number and percent of reported counties and cities with--					
	Sufficient personnel		Some personnel but not enough		No personnel of specified class	
	Number	Percent	Number	Percent	Number	Percent
Physicians:						
Counties	769	47.0	401	24.5	466	28.5
Cities	80	33.8	60	25.3	97	40.9
Nurses:						
Counties	148	9.1	1,404	85.8	84	5.1
Cities	25	10.5	191	80.6	21	8.9
Sanitation personnel:						
Counties	956	58.4	554	33.9	126	7.7
Cities	192	81.0	11	4.6	34	14.4
Clerks						
Counties	774	47.3	814	49.8	48	2.9
Cities	103	43.5	106	44.7	28	11.8

[1] See page 15 for recommended minimum staffing requirements.

The percentage of each State's total population residing in areas having sufficient personnel of all four types and of each individual type to meet minimum requirements is shown in table 10, page 22. Twenty-five States, plus the District of Columbia, did not have a single organized area staffed with the recommended minimum number of full-time health agency personnel.

In 27 States, at least three-fourths of the population, and in several a much higher proportion, lived in areas where the official health agency was not sufficiently staffed with full-time medical personnel. Temporary vacancies in health officer positions were responsible in many States for the low percentages shown for public health physicians. The employment of nonmedical health officers also accounted for physician deficiencies in some States, particularly in New Jersey and Massachusetts.

In all States, the ratio of nurses to the population to be served was extremely low. Eighteen States did not have a single area within the State which met the minimum requirement of one public health nurse per 5,000 persons. In 24 other States, less than 10 percent of the State's population lived in areas where the official health agency met this ratio.

A geographical study of staffing in the four categories of personnel was made on the basis of the constituent States of the 10 Federal Security

Agency regions.[5] Considerable variance was found among the regions in the proportion of the population living in areas having personnel of all four categories and of any one category commensurate with the minimum prescribed (see figures 3 and 4, pages 23 and 24, respectively).

Local health organizations in States comprising Region III which includes the District of Columbia, Maryland, North Carolina, Virginia, and West Virginia, and Region VI which includes Alabama, Florida, Georgia, Mississippi, South Carolina, and Tennessee were more adequately staffed than other regions in all four types of personnel (see figure 3). The percentage of the population in each of these regions with sufficient personnel of all four categories to meet the minimum requirements was 5.8 percent for Region III and 5.5 percent for Region VI, as compared to 2.0 percent for the entire nation.

States in both Regions III and VI had a relatively high proportion--91.5 percent in each region--of their population covered by full-time health organizations (see figure 3). Only Region X, including Arizona, California, Nevada, Oregon, and Washington, had a greater percentage--91.6 percent--of its population covered.

Areas in Regions III and VI generally were comparatively well-staffed with public health physicians and nurses; 53 percent of the population in Region III and 46 percent of the population in Region VI resided in areas meeting minimum physician requirements, as compared to about 24 percent of the population for the nation as a whole.

As mentioned previously, the shortage of public health nurses is most critical. Less than 4 percent of the population of the nation was served by local health units meeting prescribed minimum requirements for personnel of this type. However, Region VI had 9 percent of its population residing in areas where public health nursing personnel was commensurate with recommended minimum ratios of personnel to population. In two regions of the country less than one percent of the population was covered by health organizations staffed with sufficient public health nurses to meet basic minimum requirements.

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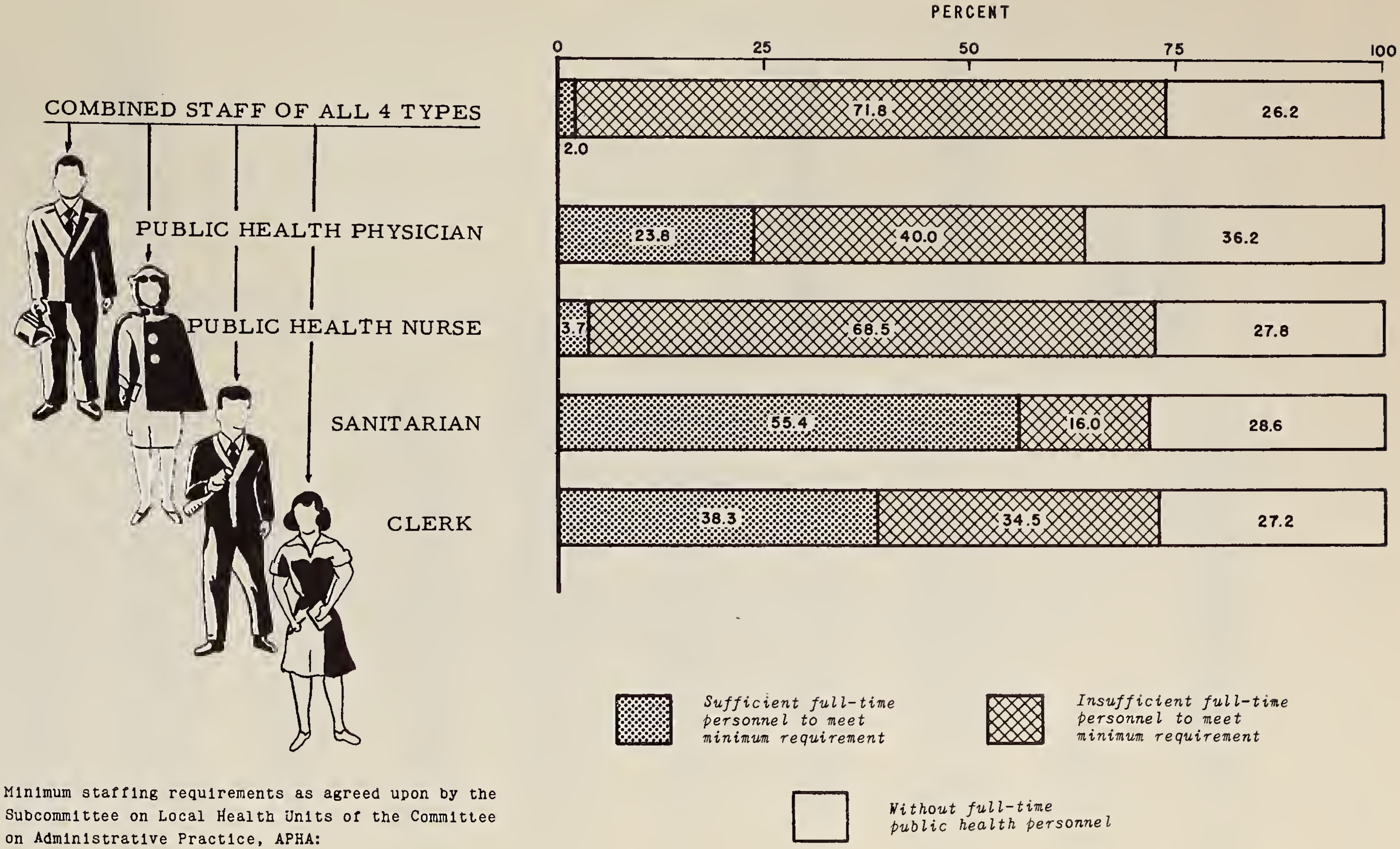
[5] The established Federal Security Agency regions and constituent States (exclusive of Puerto Rico, the Virgin Islands, and the territories of Alaska and Hawaii) are as follows:
Region I: Conn., Me., Mass., N. H., R. I., Vt.
Region II: Del., N. J., N. Y., Pa.
Region III: D. C., Md., N. C., Va., W. Va.
Region IV: Ky., Mich., Ohio
Region V: Ill., Ind., Minn., Wis.
Region VI: Ala., Fla., Ga., Miss., S.C., Tenn.
Region VII: Iowa, Kans., Mo., Nebr., N. Dak., S. Dak.
Region VIII: Ark., La., N. Mex., Okla., Tex.
Region IX: Col., Idaho, Mont., Utah, Wyo.
Region X: Ariz., Calif., Nev., Oreg., Wash.

Region X surpassed all others in the proportion of the population living in areas with sanitation workers in sufficient number to meet the minimum requirements. The percentage was higher in this instance than for any other class of personnel, amounting to about 85 percent in Region X as compared to 55 percent for all regions. Region X also outranked other regions in the availability of clerical workers.

Localities with enough workers of all four types and of each type, according to the minimum recommended staffing requirements, are shown in a series of five maps (see figures 5, 6, 7, 8, and 9, pages 25-29). Each map also shows the areas that have full-time health organizations. These combined data make it readily apparent that many health units are operating with only skeleton full-time staffs.

FIGURE 2.--PERCENT OF TOTAL U. S. POPULATION[1] RESIDING IN AREAS REPORTING SUFFICIENT FULL-TIME HEALTH AGENCY PERSONNEL OF DESIGNATED CLASSES TO MEET MINIMUM STAFFING REQUIREMENTS JUNE 30, 1949[2]



Minimum staffing requirements as agreed upon by the Subcommittee on Local Health Units of the Committee on Administrative Practice, APHA:

1 public health physician for every 50,000 persons (or every local unit, whichever is less)

1 public health nurse for every 5,000 persons,

1 sanitarian for every 25,000 persons,

1 clerk for every 15,000 persons.

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[1] Bureau of Census estimate, July 1, 1948.

[2] Data not available for unreported full-time health units; therefore, population of such areas was included in percent of U. S. population "*Without full-time public health personnel.*"

Table 10.--Percent of Total Population of Each State Residing in Areas with Sufficient Full-Time Health Agency Personnel of Designated Classes to Meet Minimum Staffing Requirements[1]
June 30, 1949

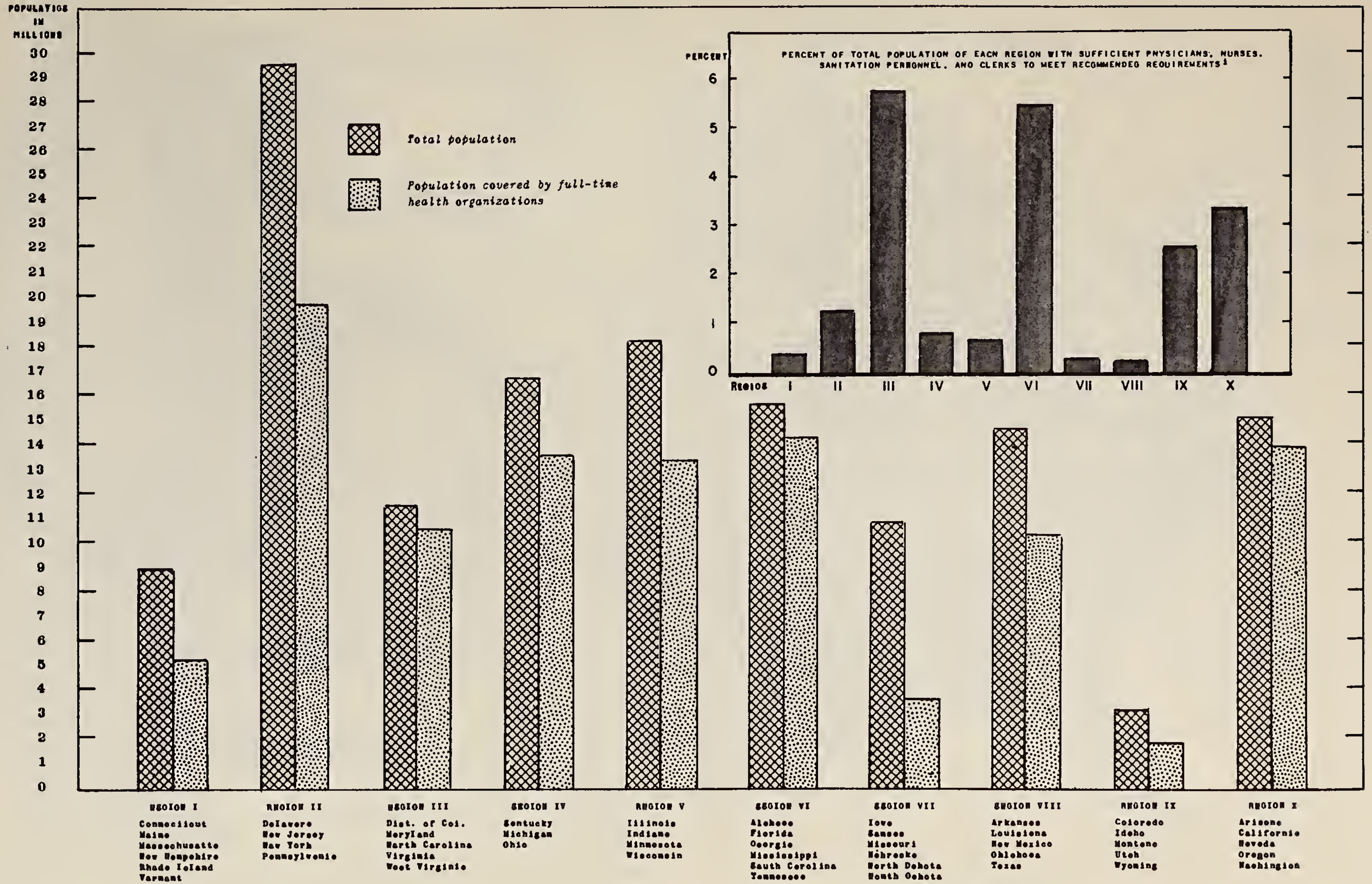
State	Total population	Percent of total State population having sufficient personnel to meet recommended minimum recuirements				
		All 4 classes	Physicians	Nurses	Sanitation personnel	Clerks
Total	146,112,000[2]	2.0	23.8	3.7	55.4	38.3
Alabama	2,901,000	0.0	42.0	0.0	84.9	34.3
Arizona	704,000	0.0	18.5	0.0	68.3	1.9
Arkansas	1,937,000	0.0	22.7	0.0	23.8	34.9
California	10,354,000	3.6	34.9	4.3	94.8	78.0
Colorado	1,199,000	7.1	55.4	9.7	56.3	19.9
Connecticut	1,989,000	0.0	19.6	0.0	35.2	20.1
Delaware	300,000	0.0	74.8	0.0	0.0	0.0
Dist. of Columbia	863,000	0.0	100.0	0.0	100.0	100.0
Florida	2,430,000	10.1	63.0	11.1	95.3	68.8
Georgia	3,167,000	14.6	37.4	31.6	55.1	39.7
Idaho	586,000	0.0	15.8	1.9	18.0	7.6
Illinois	8,348,000	0.3	9.4	0.7	13.3	6.0
Indiana	3,917,000	0.0	1.9	0.0	18.4	11.3
Iowa	2,612,000	0.0	0.0	0.0	1.5	0.0
Kansas	1,895,000	0.0	20.4	2.1	38.8	20.8
Kentucky	2,856,000	0.0	28.0	1.7	49.8	59.1
Louisiana	2,591,000	0.0	29.1	0.0	83.8	77.2
Maine	898,000	0.0	18.3	0.7	3.5	4.7
Maryland	2,155,000	15.2	34.3	27.0	83.3	94.7
Massachusetts	4,638,000	0.7	24.4	0.7	63.2	11.5
Michigan	6,216,000	1.4	28.8	3.3	68.0	43.7
Minnesota	2,934,000	0.9	7.4	3.6	39.7	27.9
Mississippi	2,114,000	3.0	65.1	3.0	84.0	71.1
Missouri	3,892,000	0.0	7.6	0.0	50.1	27.2
Montana	511,000	0.0	7.5	3.3	14.9	9.7
Nebraska	1,283,000	0.0	9.4	0.0	31.1	23.2
Nevada	164,000	0.0	14.9	0.0	14.9	14.9
New Hampshire	523,000	0.0	0.0	15.8	15.8	0.0
New Jersey	4,768,000	0.0	0.9	13.5	41.8	23.7
New Mexico	571,000	2.9	86.0	11.4	46.5	87.0
New York	14,231,000	2.2	6.5	3.9	87.4	78.3
North Carolina	3,798,000	5.2	65.4	5.9	63.8	32.4
North Dakota	582,000	5.1	16.7	9.1	25.7	5.1
Ohio	7,842,000	0.6	27.7	0.9	61.0	34.7
Oklahoma	2,295,000	1.2	39.3	1.2	42.4	17.2
Oregon	1,639,000	4.6	31.2	4.6	45.9	10.8
Pennsylvania	10,478,000	0.6	7.4	0.6	28.5	28.5
Rhode Island	745,000	0.0	8.9	0.0	8.3	0.0
South Carolina	1,982,000	2.8	40.5	3.6	80.6	42.7
South Dakota	611,000	0.0	3.7	0.0	12.7	3.7
Tennessee	3,179,000	1.1	38.2	1.6	69.1	28.8
Texas	7,371,000	0.0	15.5	0.0	52.6	25.7
Utah	670,000	0.0	11.5	11.3	60.5	2.9
Vermont*	363,000	*	*	*	*	*
Virginia	3,051,000	5.1	57.4	5.4	68.7	45.3
Washington	2,463,000	2.8	28.3	2.8	78.7	44.0
West Virginia	1,911,000	0.0	21.1	0.0	30.7	23.2
Wisconsin	3,300,000	2.1	31.8	5.4	31.1	23.0
Wyoming	285,000	0.0	13.4	0.0	13.4	0.0

[1] Minimum requirements for personnel of four designated classes as agreed upon by American Public Health Association, Committee on Administrative Practice, Subcommittee on Local Health Units:
- 1 public health physician for every 50,000 persons (or for every local health unit, whichever is less),
- 1 public health nurse for every 5,000 persons,
- 1 sanitary engineer or sanitarian for every 25,000 persons,
- 1 clerk for every 15,000 persons.

[2] Bureau of the Census estimate, July 1, 1948, exclusive of armed forces overseas.

* Vermont has no full-time health organizations rendering local health service.

FIGURE 3.--TOTAL POPULATION OF EACH FEDERAL SECURITY AGENCY REGION, POPULATION OF EACH REGION RESIDING IN AREAS ORGANIZED FOR FULL-TIME HEALTH SERVICE, AND PERCENT OF THE TOTAL POPULATION WITH THE RECOMMENDED MINIMUM NUMBER OF HEALTH AGENCY PERSONNEL OF FOUR DESIGNATED CLASSES[1]
JUNE 30, 1949



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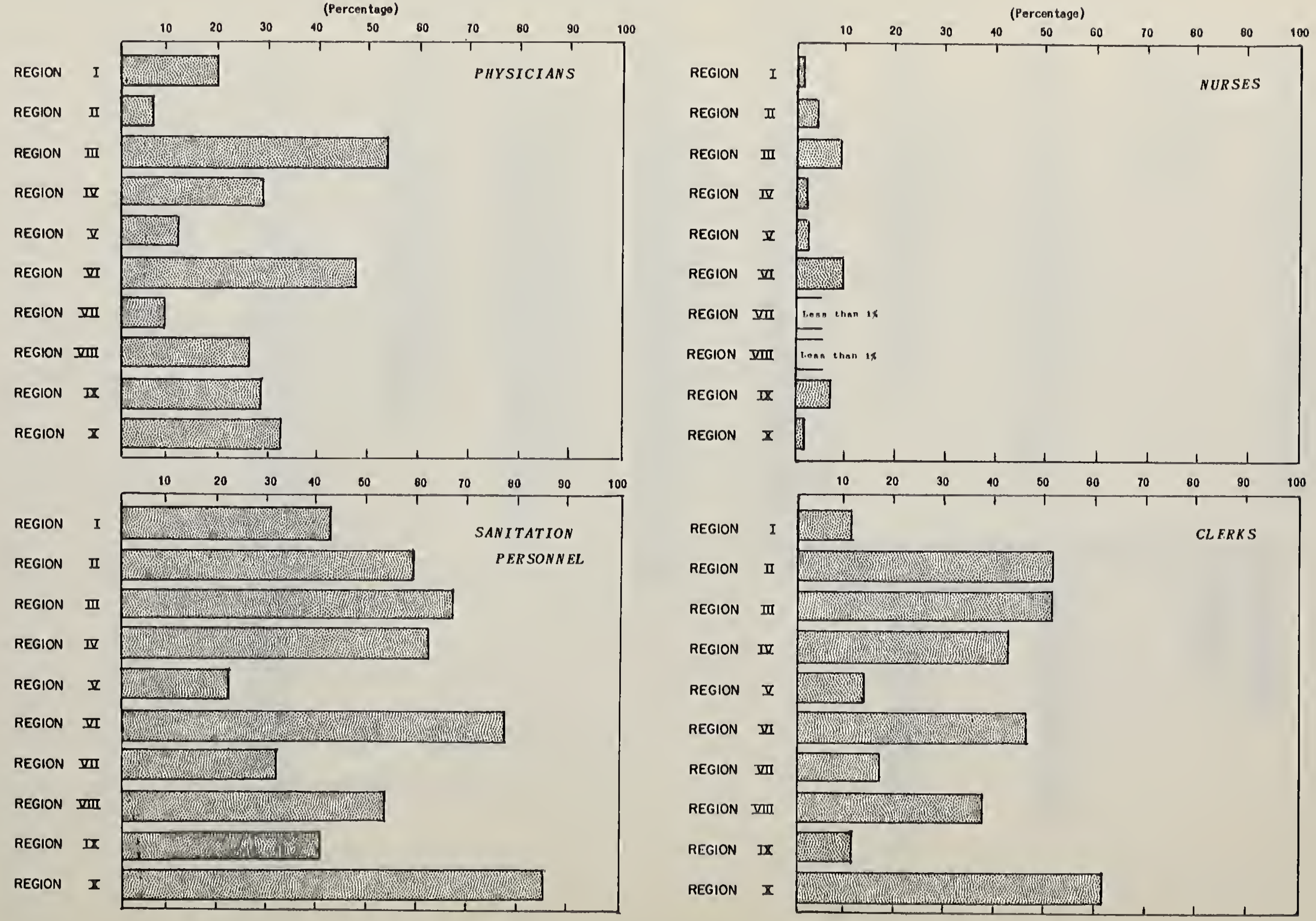
[1] Minimum staffing requirements as agreed upon by the Subcommittee on Local Health Units of the Committee on Administrative Practice, APHA:
1 public health physician for every 50,000 persons (or for each local health unit),
1 public health nurse for every 5,000 persons,
1 sanitary engineer, or sanitarian, for every 25,000 persons,
1 clerk for every 15,000 persons.

FIGURE 4.--REGIONAL DIFFERENCES IN PERCENTAGE OF THE TOTAL POPULATION OF EACH REGION[1] RESIDING IN AREAS WITH SUFFICIENT FULL-TIME HEALTH AGENCY PERSONNEL OF EACH DESIGNATED CLASS TO MEET MINIMUM STAFFING REQUIREMENTS[2]

JUNE 30, 1949



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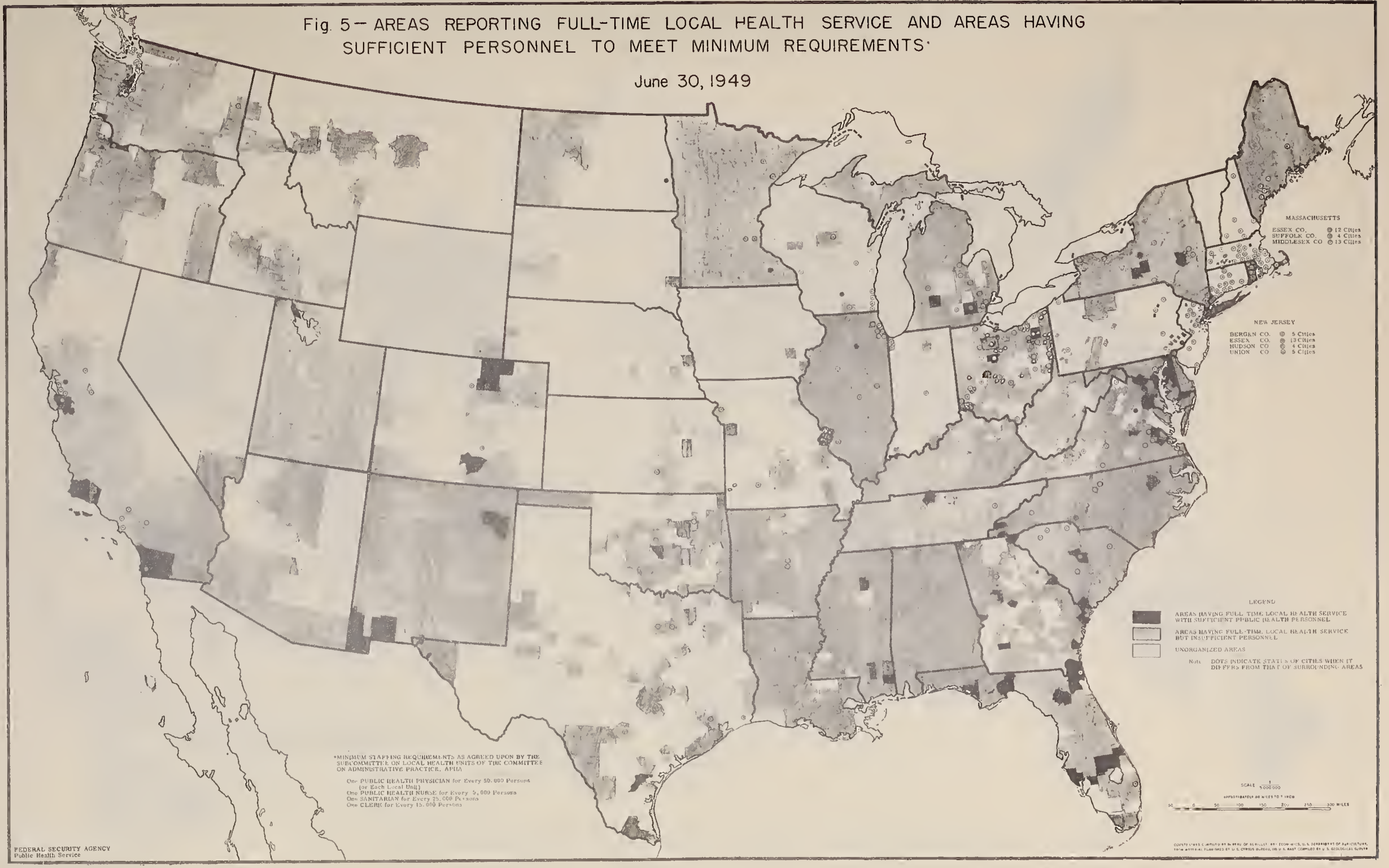
[1] REFER TO FIGURE 3 FOR IDENTITY OF STATES COMPRISING EACH REGION.

[2] REFER TO FOOTNOTE 1, FIGURE 3.

Fig. 5 — AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE AND AREAS HAVING SUFFICIENT PERSONNEL TO MEET MINIMUM REQUIREMENTS*

June 30, 1949


MASSACHUSETTS
ESSEX CO. 12 Cities
SUFFOLK CO. 4 Cities
MIDDLESEX CO 13 Cities
NEW JERSEY
BERGEN CO. 5 Cities
ESSEX CO. 13 Cities
HUDSON CO 4 Cities
UNION CO 5 Cities
LEGEND
AREAS HAVING FULL TIME LOCAL HEALTH SERVICE WITH SUFFICIENT PUBLIC HEALTH PERSONNEL
AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE BUT INSUFFICIENT PERSONNEL
UNORGANIZED AREAS
Note DOTS INDICATE STATUS OF CITIES WHEN IT DIFFERS FROM THAT OF SURROUNDING AREAS
SCALE 1/5 000 000
APPROXIMATELY 80 MILES TO 1 INCH
50 0 50 100 150 200 250 300 MILES

*MINIMUM STAFFING REQUIREMENTS AS AGREED UPON BY THE SUBCOMMITTEE ON LOCAL HEALTH UNITS OF THE COMMITTEE ON ADMINISTRATIVE PRACTICE, APHA

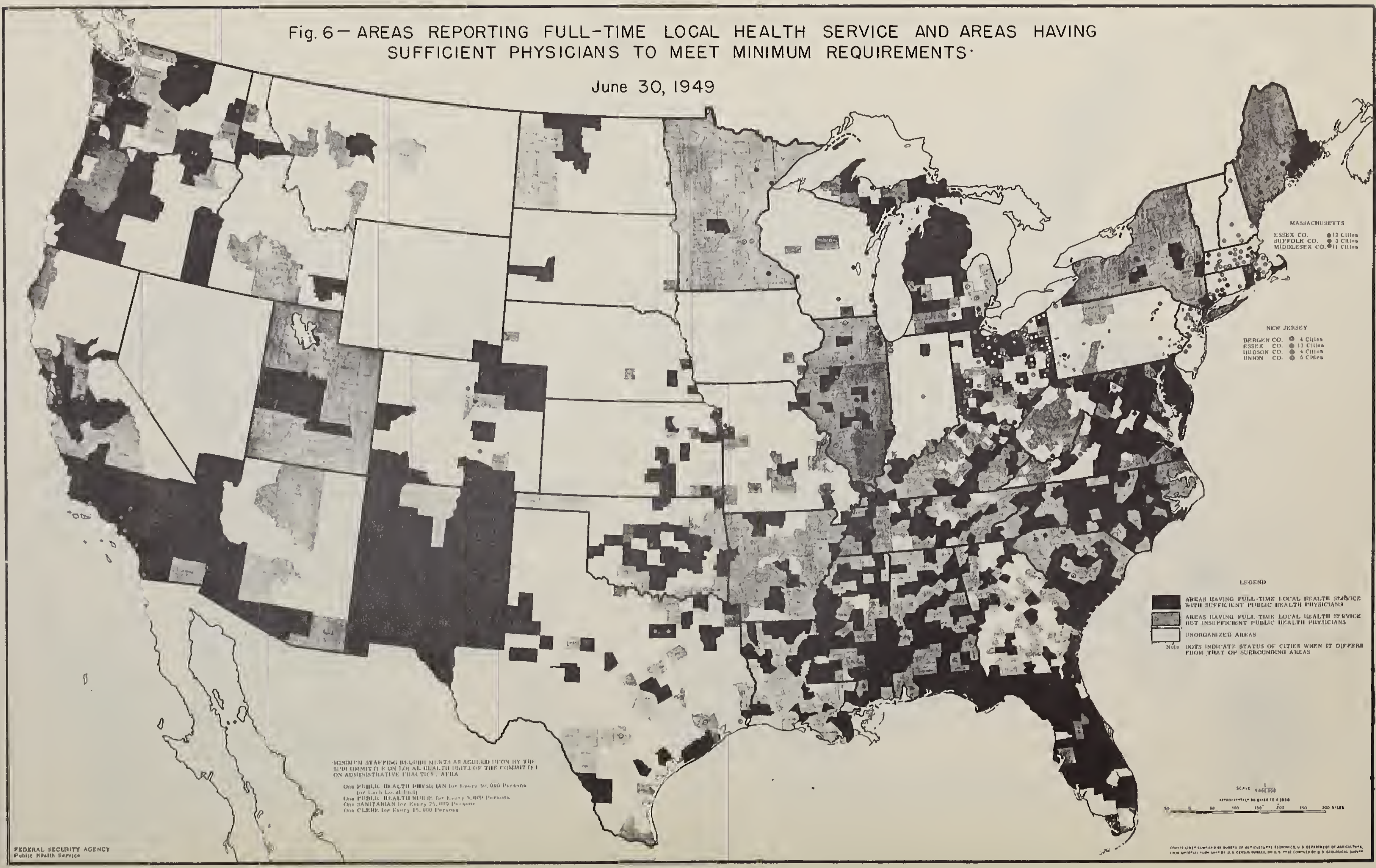
One PUBLIC HEALTH PHYSICIAN for Every 50,000 Persons (or Each Local Unit)
One PUBLIC HEALTH NURSE for Every 5,000 Persons
One SANITARIAN for Every 25,000 Persons
One CLERK for Every 15,000 Persons

COUNTY LINES COMPILED BY BUREAU OF AGRICULTURAL ECONOMICS, U.S. DEPARTMENT OF AGRICULTURE, FROM MATERIAL FURNISHED BY U.S. CENSUS BUREAU, ON U.S. BASE COMPILED BY U.S. GEOLOGICAL SURVEY

FEDERAL SECURITY AGENCY
Public Health Service

Fig. 6 — AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE AND AREAS HAVING SUFFICIENT PHYSICIANS TO MEET MINIMUM REQUIREMENTS*

June 30, 1949


MASSACHUSETTS
ESSEX CO. ● 12 Cities
SUFFOLK CO. ● 3 Cities
MIDDLESEX CO. ● 11 Cities
NEW JERSEY
BERGEN CO. ● 4 Cities
ESSEX CO. ● 13 Cities
HUDSON CO. ● 4 Cities
UNION CO. ● 5 Cities
LEGEND
AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE WITH SUFFICIENT PUBLIC HEALTH PHYSICIANS
AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE BUT INSUFFICIENT PUBLIC HEALTH PHYSICIANS
UNORGANIZED AREAS
Note DOTS INDICATE STATUS OF CITIES WHEN IT DIFFERS FROM THAT OF SURROUNDING AREAS
SCALE
0 50 100 150 200 250 300 MILES

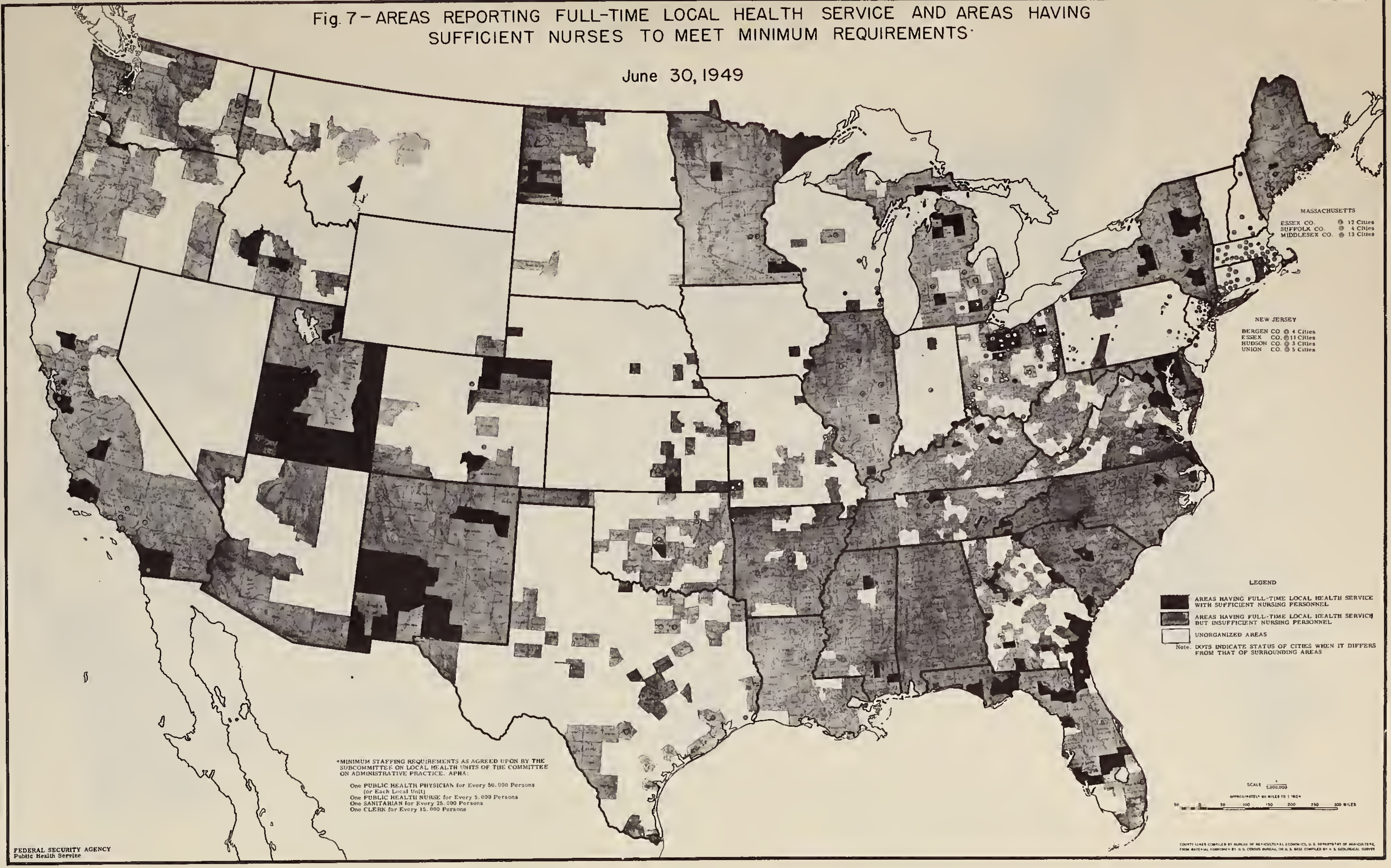
*MINIMUM STAFFING REQUIREMENTS AS AGREED UPON BY THE SUBCOMMITTEE ON LOCAL HEALTH UNITS OF THE COMMITTEE ON ADMINISTRATIVE PRACTICE, APHA

One PUBLIC HEALTH PHYSICIAN for Every 50,000 Persons (or Each Local Unit)
One PUBLIC HEALTH NURSE for Every 5,000 Persons
One SANITARIAN for Every 25,000 Persons
One CLERK for Every 15,000 Persons

FEDERAL SECURITY AGENCY
Public Health Service

Fig. 7 – AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE AND AREAS HAVING SUFFICIENT NURSES TO MEET MINIMUM REQUIREMENTS*

June 30, 1949



LEGEND

■ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE WITH SUFFICIENT NURSING PERSONNEL

▨ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE BUT INSUFFICIENT NURSING PERSONNEL

☐ UNORGANIZED AREAS

Note. DOTS INDICATE STATUS OF CITIES WHEN IT DIFFERS FROM THAT OF SURROUNDING AREAS

*MINIMUM STAFFING REQUIREMENTS AS AGREED UPON BY THE SUBCOMMITTEE ON LOCAL HEALTH UNITS OF THE COMMITTEE ON ADMINISTRATIVE PRACTICE, APHA:

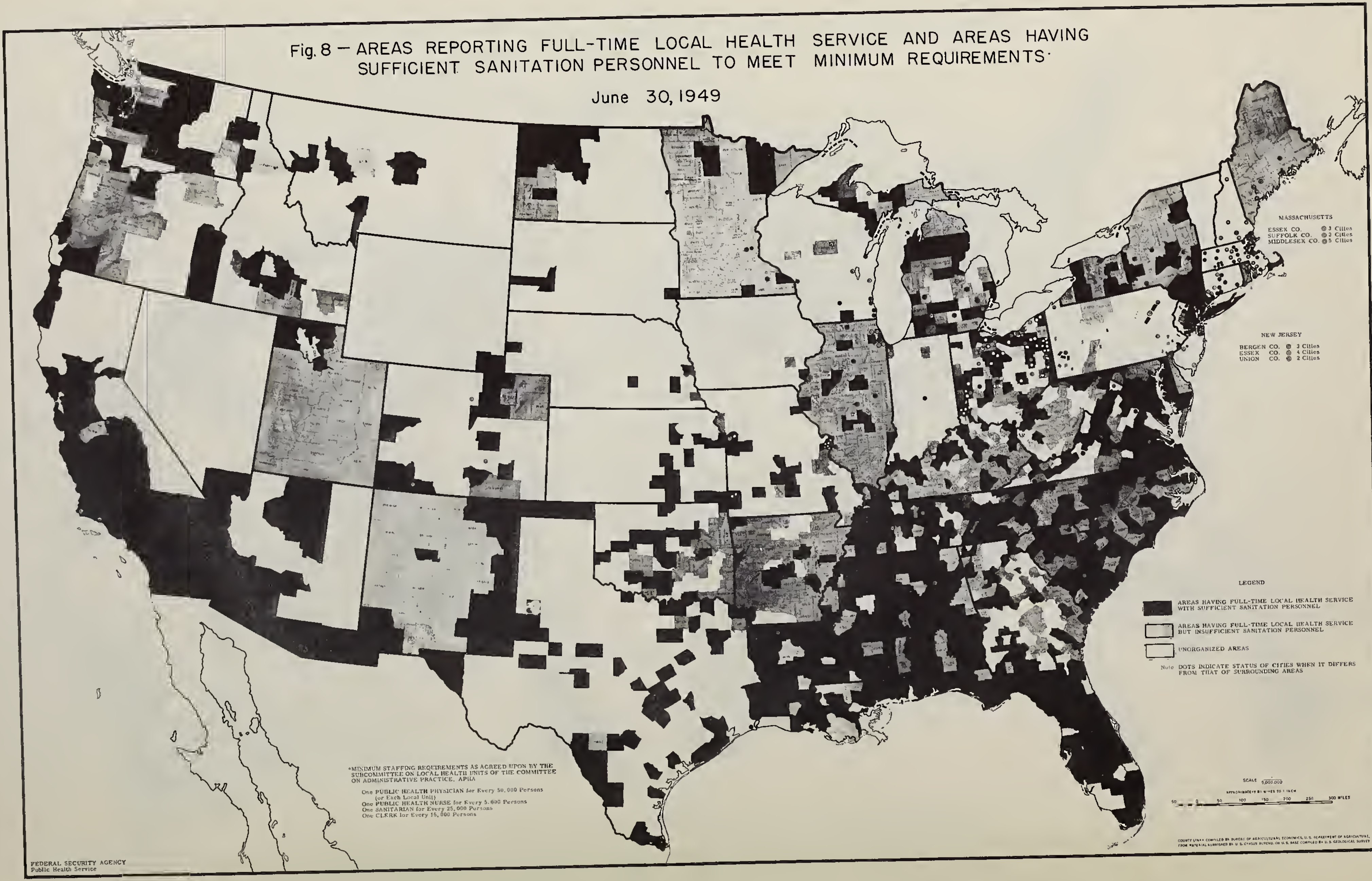
One PUBLIC HEALTH PHYSICIAN for Every 50,000 Persons (or Each Local Unit)
One PUBLIC HEALTH NURSE for Every 5,000 Persons
One SANITARIAN for Every 25,000 Persons
One CLERK for Every 15,000 Persons

COUNTY LINES COMPILED BY BUREAU OF AGRICULTURAL ECONOMICS, U. S. DEPARTMENT OF AGRICULTURE, FROM MATERIAL FURNISHED BY U. S. CENSUS BUREAU, ON U. S. BASE COMPILED BY U. S. GEOLOGICAL SURVEY

FEDERAL SECURITY AGENCY
Public Health Service

Fig. 8 — AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE AND AREAS HAVING SUFFICIENT SANITATION PERSONNEL TO MEET MINIMUM REQUIREMENTS*

June 30, 1949



LEGEND

- ■ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE WITH SUFFICIENT SANITATION PERSONNEL
- ▨ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE BUT INSUFFICIENT SANITATION PERSONNEL
- □ UNORGANIZED AREAS

Note DOTS INDICATE STATUS OF CITIES WHEN IT DIFFERS FROM THAT OF SURROUNDING AREAS

*MINIMUM STAFFING REQUIREMENTS AS AGREED UPON BY THE SUBCOMMITTEE ON LOCAL HEALTH UNITS OF THE COMMITTEE ON ADMINISTRATIVE PRACTICE, APHA

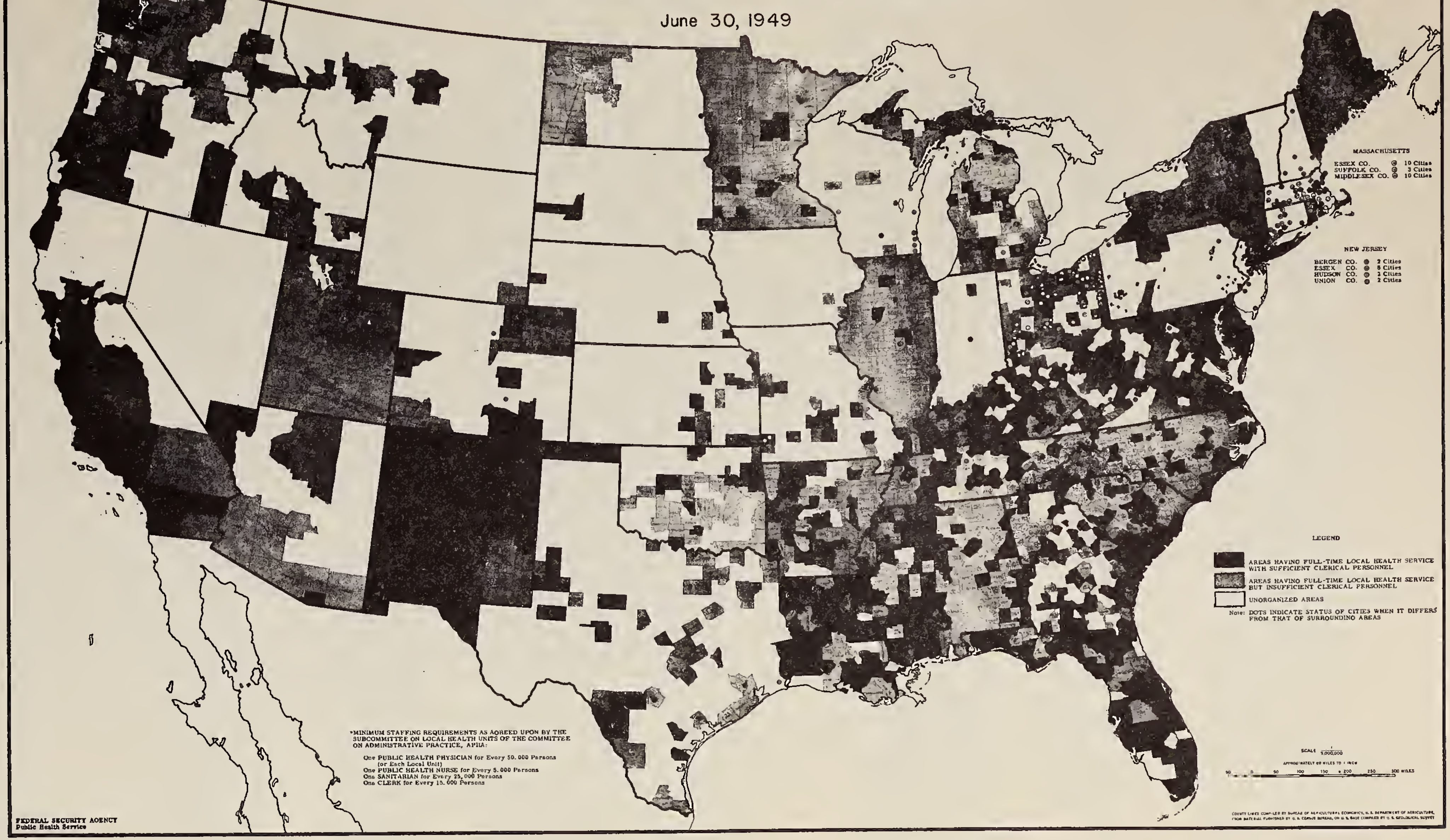
One PUBLIC HEALTH PHYSICIAN for Every 50,000 Persons (or Each Local Unit)
One PUBLIC HEALTH NURSE for Every 5,000 Persons
One SANITARIAN for Every 25,000 Persons
One CLERK for Every 15,000 Persons

COUNTY LINES COMPILED BY BUREAU OF AGRICULTURAL ECONOMICS, U. S. DEPARTMENT OF AGRICULTURE, FROM MATERIAL FURNISHED BY U. S. CENSUS BUREAU ON U. S. BASE COMPILED BY U. S. GEOLOGICAL SURVEY

FEDERAL SECURITY AGENCY
Public Health Service

Fig. 9 – AREAS REPORTING FULL-TIME LOCAL HEALTH SERVICE AND AREAS HAVING SUFFICIENT CLERKS TO MEET MINIMUM REQUIREMENTS*

June 30, 1949


MASSACHUSETTS
ESSEX CO. ◎ 10 Cities
SUFFOLK CO. ◎ 3 Cities
MIDDLESEX CO. ◎ 10 Cities
NEW JERSEY
BERGEN CO. ● 2 Cities
ESSEX CO. ● 5 Cities
HUDSON CO. ◎ 3 Cities
UNION CO. ● 2 Cities
LEGEND
■ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE WITH SUFFICIENT CLERICAL PERSONNEL
▨ AREAS HAVING FULL-TIME LOCAL HEALTH SERVICE BUT INSUFFICIENT CLERICAL PERSONNEL
☐ UNORGANIZED AREAS
SCALE 1/5,000,000
APPROXIMATELY 80 MILES TO 1 INCH
50 0 50 100 150 200 250 300 MILES

Note: DOTS INDICATE STATUS OF CITIES WHEN IT DIFFERS FROM THAT OF SURROUNDING AREAS

*MINIMUM STAFFING REQUIREMENTS AS AGREED UPON BY THE SUBCOMMITTEE ON LOCAL HEALTH UNITS OF THE COMMITTEE ON ADMINISTRATIVE PRACTICE, APHA:

One PUBLIC HEALTH PHYSICIAN for Every 50,000 Persons (or Each Local Unit)
One PUBLIC HEALTH NURSE for Every 5,000 Persons
One SANITARIAN for Every 25,000 Persons
One CLERK for Every 15,000 Persons

COUNTY LINES COMPILED BY BUREAU OF AGRICULTURAL ECONOMICS, U. S. DEPARTMENT OF AGRICULTURE, FROM MATERIAL FURNISHED BY U. S. CENSUS BUREAU, ON U. S. BASE COMPILED BY U. S. GEOLOGICAL SURVEY

FEDERAL SECURITY AGENCY
Public Health Service

The availability of public health facilities is another significant index of the resources of the community for protecting the health of its citizens. Of utmost importance in community-wide health protection are the clinical centers of specialized types; the hospitals with special facilities for rendering a variety of personal health services; and the preventive measures provided, with or without the use of established clinical or hospital facilities.

Local health programs vary widely not only among the States but among localities within the same State. The frequency of reporting the presence of certain types of services and facilities within the area served by the health organization gives indication of the activities commonly incorporated in local health programs.

The facilities and services included in the data presented are those made available on a free or part-pay basis to individuals through agencies serving the community such as the official health agency, official agencies other than the health agency, or voluntary agencies. Occasionally, the facilities and services are jointly administered by two or more agencies, each agency having some phase of administrative responsibility.

Clinical Facilities

The operation of various kinds of clinical facilities is one of the outstanding services rendered by local health agencies. In many disease control programs, local health departments as well as State health departments are focusing attention upon the development and full utilization of clinical facilities, giving emphasis to early detection of disease. The effectiveness of many of the clinical services is dependent on the participation of local physicians. New and improved methods for the prevention and detection of various diseases are frequent outgrowths of cooperative endeavor on the part of the health agency staff and the local practitioners to meet the community health needs.

Table 11, page 37, contains a summarization of the number of clinical facilities of selected types reported by the 1,242 reporting health units. It will be noted that venereal disease, medical well-child, tuberculosis diagnostic, and medical maternity centers were more frequently reported than other types.

Nearly 71 percent of the reporting health units indicated the presence of public health clinical facilities for the diagnosis and treatment of venereal diseases. The 2,011 centers were distributed among 46 States and the District of Columbia; no clinics of this type were recorded in the reports submitted from full-time health units in North Dakota. Approximately 85 percent of the venereal disease centers, holding clinics at least weekly, were operated by official health agencies.

Tuberculosis diagnostic centers have proved of extreme value to communities in the prevention and control of tuberculosis. Centers of this type numbered 1,253 and were operating in 691 health jurisdictions in 43 States and the District of Columbia, representing 56 percent of the jurisdictions from which reports were received. Only established centers holding clinics at least once a month and having at least one physician in attendance, X-ray or fluoroscopic equipment, and laboratory facilities for sputa examination were included in the count of diagnostic clinics. Photofluorographic case-finding units were reported separately. There were 903 of these latter units performing case-finding activities throughout 519 health jurisdictions in 42 States and the District of Columbia. No information on this type of facility was received from one State. Centers having facilities for administering collapse therapy to tuberculosis patients not confined to a sanatorium totaled 717 and service of this type was provided in 38 percent of the health jurisdictions.

The protection of the health of mothers, infants, and preschool children is one of the most important functions of the health department. The operation of maternity and pediatric clinical facilities, and well-child centers affords opportunity for medical supervision for both mothers and children. In 1949, there were 4,223 centers holding well-child conferences at least monthly under the direction of a physician. These centers were reported by more than two-thirds of the health departments. Such facilities were most prevalent in two States, California and New York. Well-child conferences provide protection for children not under the care of a private physician through periodic check-ups on child growth and development. A high percentage of these centers--nearly 90 percent--were sponsored by official health agencies.

Clinical facilities for the medical supervision of prospective mothers were operating in better than half the health jurisdictions. Seven States, excluding Vermont, did not report provision of maternity services. Relatively large numbers of maternity centers were operating in local areas of the Southern States. Nearly 72 percent of the 2,089 centers were under the administration of official health agencies.

Diagnostic and treatment facilities for sick children were less commonly reported than other types of clinical centers in the maternity - child health group. While only a fourth of the health jurisdictions reported pediatric clinical services available, the 827 centers of this type were distributed throughout 39 States and the District of Columbia.

Health jurisdictions in as many as 41 States, including the District of Columbia, reported 641 clinical facilities for providing diagnostic and treatment services for children under 21 years of age who are crippled or who are suffering from conditions which lead to crippling. Health units in the State of New York reported about one-sixth of the total clinical facilities of this type. There were relatively few centers throughout the country holding clinics at least monthly for special conditions such as rheumatic fever and cardiac conditions and cerebral palsy. Unlike the clinical facilities already discussed, centers providing services for crippled children were most frequently administered by official agencies other than health, or by voluntary agencies.

Likewise, other official agencies and voluntary agencies actively participated in or administered the clinical facilities in the control programs for cancer, mental hygiene, heart, and diabetes, which have comparatively recently been incorporated in the comprehensive health program of a number of health departments. Clinical services in these newer disease areas were quite scattered.

Mental hygiene clinics, scheduled at least monthly, were held at 533 centers within 24 percent of the health jurisdictions. Almost one-third of these centers were in California and New York. This count included child guidance clinics as well as general psychiatric clinics. These centers were staffed with at least a psychiatrist, a clinical psychologist, and a psychiatric social worker under the supervision of a psychiatrist. Approximately 80 percent of the mental hygiene clinical facilities were administered by an agency other than the official health agency.

Cancer clinical facilities and detection centers were available in 43 States and the District of Columbia. There were 434 diagnostic and treatment centers reported by 241 health jurisdictions. Diagnostic facilities only were reported by 240 jurisdictions and numbered 365. Cancer detection facilities were operating in 185 jurisdictions within 36 States. This type of center numbered 282. Sponsorship of cancer clinical facilities by official health agencies was also quite infrequent as compared to the number operated under the sponsorship of other official agencies or voluntary agencies.

Clinical facilities for heart and diabetic patients were reported in relatively few areas. Only 13 percent of the health jurisdictions indicated the presence of facilities for providing diagnosis and/or care for cardiac patients under the direction of a physician. These centers were located in health units of 36 States and the District of Columbia. Only 11 percent of the reporting jurisdictions of 33 States and the District of Columbia signified the presence of centers for the diagnosis of diabetes and/or care of diabetics. Service for the evaluation of laboratory and clinical findings were also offered at these centers. Again participation by official health agencies in the administration of such centers was very limited.

Centers of a general type, providing undifferentiated clinical services, and large medical centers having highly specialized outpatient departments which provide a variety of specialized clinical services were reported in operation in one-fourth of the health jurisdictions. Some of these centers, referred to as polyclinics and providing specialized services, were reported under the speciality represented as well as under the polyclinic category. The count of polyclinics totaled 802.

Table 12, page 38, summarizes the number of health jurisdictions in each State having centers at which the various clinical services are provided on a free or part-pay basis. The total number of clinical facilities of each type is also shown for each State.

Selected Public Health Services and Hospital Facilities

In addition to services generally provided through public health clinical centers, a variety of other services are made available on a free or part-pay basis with or without the use of clinical facilities. For example, immunizations--an activity of almost every local health program--may be performed at well-child clinics, in the school, in the health department office, or in the office of private physicians. Table 13, page 39, gives a summarization of specific services, many of which are similarly administered, reported by local health jurisdictions as available to residents of the areas covered. Table 14, page 40, shows the number and percent of the local jurisdictions in each State reporting these various services.

Ninety-seven percent of the health units indicated the availability of immunization service. This service, being one of the traditional health department responsibilities, was provided in most areas by the official health agency. Perhaps no other service affords greater protection to the community.

Corrective services for school age children were also among those services made widely available. There were 830, or 67 percent, of the health jurisdictions which reported the provision of corrective measures for visual defects. This service, which includes medical eye examinations and treatment as well as provision of glasses, was a health department function in only 30 percent of the health units reporting the service.

Dental corrective services for school children were made available in slightly fewer areas than visual services; 62 percent of the local health units signified the provision of corrective services for dental defects. Such services, which included extractions, fillings, treatment of oral infections, and orthodontia, in addition to prophylaxis, were sponsored by official health agencies in nearly two-thirds of the health jurisdictions reporting availability of service.

Health units of only three States--North Dakota, New Hampshire, and Wyoming--did not signify the availability of visual corrective services. Likewise, dental corrective services were not available on a free or part-pay basis in two of these States--New Hampshire and Wyoming.

Correction of hearing impairments in school children was far less commonly provided than visual and dental corrections. In only 39 percent of the health jurisdictions, ear examinations and aural treatment were given under medical supervision, and hearing aids were provided when needed. This service was a health department function in approximately 40 percent of the 485 health jurisdictions that reported provision of auditory corrections. Medical corrective service for school age children with nose, throat, speech, or other remediable defects was reported by 460 health jurisdictions or 37 percent of the reporting health units.

In some areas, the health program included corrective measures for preschool children and adults with dental defects. Provision of dental corrective service to adults was infrequently reported, only 27 percent of the health jurisdictions indicated the availability of this service. Dental correction and treatment for preschool children was performed on a slightly more widespread basis. A total of 484 reporting health jurisdictions, or 39 percent, signified the availability of this service to the preschool child.

Other personal services made available in a fairly limited number of areas included general bedside nursing care and treatment of individual venereal disease patients by private physicians. General bedside nursing care, including home delivery nursing service, was supplied in 33 percent of the areas covered by the reports. Almost two-thirds of the health jurisdictions indicated that this service was performed by an official agency other than health, or by a voluntary agency. Slightly more than a fifth of the health units reported authorization of treatment of venereal disease patients on a case-by-case basis. When this medical service was provided, the official health agency usually made the arrangements for treatment.

Public health laboratory services of a general nature, such as communicable disease diagnosis and water, milk, and food analysis, were indicated by 43 percent of the health units. Clinical laboratory services, such as performance of blood counts, urinalysis, basal metabolism tests, and pathology, were available in a slightly higher percentage of the health units than were general laboratory services; 48 percent of the 1,242 reporting health units indicated the availability of local clinical laboratory services.

In addition to the organized public health clinical facilities discussed in the preceding section, most of which are operated as outpatient services of hospitals, hospital facilities were also available in many areas for providing, on a free or part-pay basis, various specialized medical services administered through in-patient departments. The most frequently reported facilities of this type provided care for maternity patients and newborn infants and premature infant care. The presence of hospitals with special facilities for such care was signified by better than half the reporting health units.

Hospitals with special facilities for pediatric care were reported to be operating in 41 percent of the health units; for care of acute poliomyelitis patients and for general communicable disease patients in 29 percent. Special facilities for care of patients with venereal disease, patients with mental disorders, and cancer patients were available in 23, 21, and 19 percent of the health units, respectively. Except for hospital services provided for acute polio cases and venereal disease cases, official health agencies administered a very small percentage of these various facilities.

Table 11.--Number and Percent of Health Jurisdictions Having Clinical Facilities of Designated Types and Number of Such Facilities Operated by Official Health Agencies and by Other Official Agencies or Voluntary Agencies
June 30, 1949

Type of clinical center	Health jurisdictions with clinical centers		Number of centers		
	Number	Percent of total	Total	Operated by official health agencies	Operated by other official or voluntary agencies
Cancer:					
Diagnostic and treatment	241	19.4	434	70	364
Diagnostic only	240	19.3	365	53	312
Detection only	185	14.9	282	58	224
Crippled children (medical):					
Orthopedic or general*	309	24.9	641	154	487
Special rheumatic fever and cardiac*	160	12.9	382	71	311
Special cerebral palsy*	123	9.9	155	24	131
Other specialized clinics*	57	4.6	98	32	66
Diabetes1/	122	9.8	341	29	312
Heart1/	161	13.0	340	47	293
Maternity-child health (medical):					
Maternity*	669	53.9	2,089	1,497	592
Pediatric*	320	25.8	827	310	517
Well-child*	833	67.1	4,223	3,772	451
Mental hygiene*	292	23.5	533	108	425
Polyclinic	314	25.3	802	282	520
Tuberculosis:					
Diagnostic*	691	55.6	1,253	860	393
Collapse therapy for non-sanatorium patients	476	38.3	717	305	412
Photofluorographic case-finding units	519	41.8	903	506	397
Venereal disease**	881	70.9	2,011	1,704	307

1/ Data not available from one State.
* Held at least monthly.
** Held at least weekly.

Table 12 --Number of Health Jurisdictions Having Clinical Facilities of Designated Types and Number of Such Facilities
Operated by Official Health Agencies, Other Official Agencies, or Voluntary Agencies
June 30, 1949

State	Cancer clinic centers						Clinic centers for crippled children								Maternity-child health clinic centers						Tuberculosis clinic centers						Diabetes		Heart		Mental hygiene		Polyclinic		Venereal disease	
	Diagnostic and treatment		Diagnostic only		Detection		Orthopedic or general		Special rheumatic fever and cardiac		Special cerebral palsy		Other specialized clinics		Medical maternity		Medical pediatric		Medical well-child		Diagnostic		Collapse therapy (non-sanatorium patients)		Photofluorographic case-finding units											
	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers	Jurisdictions	Centers
Total	241	434	240	365	185	282	309	641	160	382	123	155	57	98	669	2,089	320	827	833	4,223	691	1,253	476	717	519	903	122	341	161	340	292	533	314	802	881	2,011
Alabama	3	5	1	2	1	1	7	9	1	2	3	3	-	-	36	91	7	11	18	61	17	24	15	18	8	10	2	2	2	2	1	1	2	3	12	23
Arizona	-	-	-	-	2	3	2	5	1	1	-	-	-	-	4	8	2	3	5	32	2	2	2	3	4	5	-	-	1	1	1	1	2	2	4	5
Arkansas	3	3	8	9	-	-	4	4	1	1	2	2	-	-	13	26	2	2	16	37	5	5	20	35	4	6	2	2	2	2	1	1	2	2	21	43
California	18	37	22	53	8	14	26	42	20	42	22	29	14	22	40	119	25	61	45	528	41	102	36	68	38	89	12	18	20	32	22	64	37	112	41	114
Colorado	2	3	1	2	1	1	1	1	1	2	1	1	-	-	4	9	1	4	6	41	3	4	3	6	4	5	1	1	1	2	5	5	1	2	4	6
Connecticut	8	17	10	19	8	14	7	14	5	6	4	6	5	6	10	17	8	15	11	58	11	13	3	4	7	11	6	12	5	11	9	14	6	16	10	17
Delaware	3	6	3	3	3	6	2	4	-	-	-	-	-	-	3	11	2	15	4	25	4	8	1	2	1	2	2	5	1	3	4	4	2	8	4	9
Dist. of Columbia	1	3	1	1	1	2	1	3	1	3	1	3	1	4	1	13	1	10	1	14	1	6	1	2	1	2	1	5	1	5	1	5	1	7	1	3
Florida	10	14	10	11	7	10	7	10	1	3	2	2	-	-	36	154	14	47	35	169	16	27	10	13	18	29	6	9	3	6	7	9	24	88	36	127
Georgia	14	18	1	2	3	4	6	14	2	2	2	2	1	1	46	142	19	37	45	190	21	42	27	36	10	12	5	5	5	5	5	6	8	14	26	56
Idaho	-	-	-	-	-	-	1	1	-	-	-	-	-	-	2	2	-	-	4	22	1	1	1	1	4	4	-	-	-	-	-	-	1	1	5	5
Illinois	14	17	9	9	1	4	10	16	5	9	3	6	2	5	7	67	6	14	20	222	30	67	26	38	21	37	2	2	3	3	21	36	6	6	25	69
Indiana	2	5	1	3	1	1	2	4	-	-	1	1	-	-	1	8	3	7	4	18	3	6	3	5	4	10	-	-	-	-	4	6	1	3	4	6
Iowa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	-	-	2	3	-	-	-	-	1	1	-	-	1	2
Kansas	5	6	9	19	-	-	2	4	-	-	2	2	1	1	4	5	3	3	13	53	6	10	4	5	4	7	2	2	1	1	4	4	3	3	11	14
Kentucky	13	15	-	-	-	-	5	7	-	-	3	3	-	-	24	38	8	13	21	65	11	15	6	9	44	57	1	1	3	3	2	4	10	19	47	75
Louisiana	9	13	8	12	8	12	11	17	3	3	1	1	-	-	38	80	4	7	37	86	24	24	9	9	9	11	4	4	4	4	6	6	11	21	50	94
Maine	5	6	5	9	-	-	3	4	2	2	-	-	-	-	3	5	4	4	9	43	6	7	8	14	2	4	-	-	-	-	4	5	4	6	8	12
Maryland	2	4	19	25	18	26	2	14	9	20	1	1	8	11	22	76	15	33	21	135	24	41	8	11	17	39	2	12	3	8	10	14	5	23	24	47
Massachusetts	11	24	16	25	7	12	12	33	6	27	3	3	6	7	17	33	18	42	38	106	30	57	15	17	14	30	10	35	9	28	16	24	15	45	15	25
Michigan	7	10	11	11	13	22	14	34	11	36	3	5	1	12	8	21	14	29	29	106	28	36	27	39	26	50	5	24	6	27	20	25	8	15	19	32
Minnesota	3	3	2	2	3	4	4	8	2	4	2	2	2	3	6	9	5	7	7	38	7	16	7	18	6	14	2	3	3	5	5	7	6	9	4	8
Mississippi	1	1	2	2	3	3	2	2	-	-	1	1	-	-	61	214	-	-	61	190	61	85	6	6	55	65	-	-	-	-	12	12	2	2	67	173
Missouri	2	9	1	1	1	1	3	13	4	4	4	4	1	1	5	24	6	22	13	53	7	18	5	8	3	10	3	10	2	6	3	7	9	25	14	28
Montana	1	1	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	2	2	1	1	2	3	2	2	-	-	-	-	3	7	-	-	2	2
Nebraska	2	3	2	2	-	-	2	3	1	1	1	1	-	-	2	3	2	3	3	11	2	6	2	4	2	7	2	3	1	1	1	3	2	3	2	6
Nevada	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	2	-	-	-	-	-	-	-	-	-	-	1	1
New Hampshire	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	3	1	1	-	-	1	1	-	-	-	-	1	1	-	-	1	1
New Jersey	-	-	20	29	-	-	20	39	15	26	6	6	-	-	20	36	19	34	41	124	23	39	5	8	a/	a/	a/	a/	15	25	18	49	22	41	26	35
New Mexico	2	3	-	-	3	4	1	1	1	2	-	-	1	2	6	19	4	14	9	53	2	2	4	7	2	2	-	-	1	2	1	1	-	-	9	15
New York	25	73	-	-	14	28	25	111	16	94	11	14	-	-	22	136	16	81	32	335	34	128	29	55	22	56	11	93	16	32	30	106	14	38	29	142
North Carolina	8	10	7	8	6	6	30	35	3	3	6	6	-	-	65	234	24	64	56	231	51	74	31	39	58	87	3	5	4	4	6	7	37	86	70	208
North Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	14	25	18	30	18	28	17	31	8	23	6	7	3	5	17	49	13	43	25	133	39	78	27	37	37	74	8	15	11	27	19	36	10	42	25	53
Oklahoma	3	3	3	3	10	10	5	5	2	3	2	2	2	3	12	26	4	4	19	93	26	45	16	22	4	5	5	7	5	7	2	3	8	13	27	54
Oregon	1	1	7	10	1	1	3	5	2	2	4	5	1	1	2	3	4	6	12	46	3	5	5	6	3	5	2	2	2	2	1	2	2	2	16	20
Pennsylvania	3	35	2	4	3	12	4	47	3	12	3	5	1	3	4	60	3	51	4	125	4	35	4	28	3	23	3	35	3	50	2	7	3	57	4	71
Rhode Island	1	1	1	1	1	1	-	-	3	4	-	-	-	-	3	3	1	1	5	22	5	11	3	3	4	7	1	1	2	2	1	1	1	1	3	3
South Carolina	7	8	5	6	2	2	7	7	3	3	1	1	-	-	31	114	8	18	29	81	30	49	15	21	5	5	2	2	1	1	2	2	7	15	34	87
South Dakota	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	-	-	1	1	-	-	-	-	-	-	1	1	1	1	1	1
Tennessee	6	10	5	9	6	8	7	15	2	5	4	7	-	-	9	30	6	16	24	139	39	76	16	22	20	34	3	5	3	4	6	6	5	9	48	95
Texas	8	11	10	15	8	10	13	28	5	8	8	13	4	6	24	71	14	35	29	164	19	25	18	21	12	19	5	6	8	10	6	6	11	24	43	85
Utah	1	1	1	4	2	6	2	5	3	7	2	2	-	-	4	11	2	4	6	88	1	1	1	1	1	1	1	1	1	1	1	2	3	5	2	3
Vermont*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Virginia	10	10	10	11	7	7	20	25	10	11	2	3	1	1	39	96	22	46	30	78	16	21	28	40	15	22	3	4	6	6	14	15	8	10	40	77
Washington	4	8	3	6	7	11	6	7	4	6	3	3	1	1	6	7	4	10	9	60	13	15	14	19	16	31	3	7	2	5	2	2	9	13	18	21
West Virginia	7	8	5	6	4	4	10	10	2	2	2	2	-	-	11	17	5	6	21	86	15	16	7	7	3	3	1	1	3	4	3	6	2	3	23	33
Wisconsin	1	1	-	-	2	2	2	3	2	3	1	1	1	3	1	2	1	4	9	50	7	8	4	4	3	7	1	2	2	3	8	9	3	7	3	4
Wyoming	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1

a/ No data submitted for New Jersey.

* Vermont has no full-time health organizations rendering local health service.

Table 13.--Number and Percent of Health Jurisdictions Having Designated Types of Health Services and Special Hospital Facilities Provided by Official Health Agencies, Other Official Agencies, or Voluntary Agencies
June 30, 1949

Type of service or facility	Health jurisdictions with service or facility		
	Number	Percent of total	Number with service or facility provided by official health agency only
Service			
Dental corrective:			
School children	770	62.0	488
Preschool children	484	39.0	295
Adults	333	26.8	124
General bedside nursing care[1]	407	32.8	148
Immunizations	1,210	97.4	1,186
Medical corrective (school children):			
Vision	830	66.8	250
Hearing	485	39.0	191
Other	460	37.0	150
Physician treatment of venereal disease patients (private)	265	21.3	228
Laboratory:			
Clinical	601	48.4	179
General public health	539	43.4	462
Hospitals with special facilities for--			
Cancer patients	231	18.6	19
General communicable disease patients[2]	357	28.7	58
Maternity patients	695	56.0	29
Patients with mental disorders	262	21.1	23
Pediatric care	504	40.6	23
Poliomyelitis (acute) patients	361	29.1	122
Premature infants	679	54.7	30
Venereal disease patients having public health significance	286	23.0	107

[1] Includes home delivery nursing service.

[2] Exclusive of venereal disease and tuberculosis patients.

Table 14.--Number and Percent of Health Jurisdictions in Each State Having Designated Types of Health Services Provided by Official Health Agencies, Other Official Agencies, or Voluntary Agencies June 30, 1949

State	Dental Corrective						Medical Corrective (School children)						Laboratory				Immunizations		General bedside nursing care		Physician treatment of V.D. patients (private)	
	Pre-school Children		School Children		Adults		Vision		Hearing		Other		General Public Health		Clinical							
	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total	No. of juris-dictions	Percent of total
Total	484	39.0	770	62.0	333	26.8	830	66.8	485	39.0	460	37.0	539	43.4	601	48.4	1,210	97.4	407	32.8	265	21.3
Alabama	16	29.1	30	54.5	8	14.5	19	34.5	6	10.9	6	10.9	9	16.4	10	18.2	54	98.2	1	1.8	1	1.8
Arizona	2	33.3	4	66.7	3	50.0	3	50.0	1	16.7	1	16.7	5	83.3	5	83.3	6	100.0	-	-	2	33.3
Arkansas	2	7.4	5	18.5	2	7.4	26	96.3	2	7.4	7	25.9	24	88.9	4	14.8	26	96.3	2	7.4	-	-
California	32	66.7	36	75.0	26	54.2	34	70.8	32	66.7	18	37.5	41	85.4	38	79.2	45	93.8	21	43.8	8	16.7
Colorado	3	33.3	5	55.6	1	11.1	8	88.9	7	77.8	8	88.9	6	66.7	7	77.8	9	100.0	3	33.3	5	55.6
Connecticut	6	54.5	10	90.9	6	54.5	10	90.9	8	72.7	7	63.6	8	72.7	9	81.8	11	100.0	11	100.0	2	18.2
Delaware	2	50.0	3	75.0	1	25.0	3	75.0	2	50.0	1	25.0	2	50.0	3	75.0	4	100.0	1	25.0	1	25.0
Dist. of Columbia	1	100.0	1	100.0	1	100.0	1	100.0	1	100.0	-	-	1	100.0	1	100.0	1	100.0	1	100.0	-	-
Florida	15	40.5	27	73.0	7	18.9	23	62.2	12	32.4	18	48.6	9	24.3	20	54.1	37	100.0	5	13.5	-	-
Georgia	14	28.0	28	56.0	13	26.0	25	50.0	15	30.0	9	18.0	15	30.0	22	44.0	48	96.0	5	10.0	4	8.0
Idaho	3	60.0	4	80.0	1	20.0	5	100.0	1	20.0	5	100.0	5	100.0	5	100.0	5	100.0	4	80.0	2	40.0
Illinois	14	35.9	23	59.0	6	15.4	26	66.7	14	35.9	9	23.1	22	56.4	18	46.2	39	100.0	30	76.9	32	82.1
Indiana	2	33.3	3	50.0	2	33.3	4	66.7	2	33.3	3	50.0	5	83.3	3	50.0	6	100.0	4	66.7	1	16.7
Iowa	2	100.0	2	100.0	2	100.0	2	100.0	-	-	2	100.0	-	-	2	100.0	2	100.0	1	50.0	-	-
Kansas	13	92.9	13	92.9	13	92.9	11	78.6	9	64.3	7	50.0	4	28.6	4	28.6	14	100.0	4	28.6	-	-
Kentucky	6	9.7	26	41.9	4	6.5	35	56.5	11	17.7	9	14.5	11	17.7	17	27.4	60	96.8	5	8.1	1	1.6
Louisiana	11	20.4	17	31.5	5	9.3	28	51.9	10	18.5	8	14.8	19	35.2	13	24.1	53	98.1	2	3.7	-	-
Maine	11	100.0	11	100.0	1	9.1	4	36.4	1	9.1	-	-	3	27.3	11	100.0	11	100.0	8	72.7	11	100.0
Maryland	23	95.8	24	100.0	24	100.0	16	66.7	11	45.8	6	25.0	12	50.0	12	50.0	24	100.0	10	41.7	18	75.0
Massachusetts	27	50.9	47	88.7	26	49.1	31	58.5	30	56.6	4	7.5	24	45.3	28	52.8	52	98.1	52	98.1	3	5.7
Michigan	18	32.7	38	69.1	12	21.8	50	90.9	34	61.8	47	85.5	34	61.8	37	67.3	55	100.0	31	56.4	34	61.8
Minnesota	13	86.7	13	86.7	12	80.0	15	100.0	14	93.3	10	66.7	8	53.3	10	66.7	15	100.0	10	66.7	14	93.3
Mississippi	55	82.1	55	82.1	-	-	62	92.5	62	92.5	62	92.5	8	11.9	24	35.8	66	98.5	-	-	-	-
Missouri	3	10.7	8	28.6	6	21.4	10	35.7	3	10.7	10	35.7	6	21.4	15	53.6	26	92.9	10	35.7	-	-
Montana	2	40.0	2	40.0	-	-	3	60.0	1	20.0	-	-	4	80.0	4	80.0	5	100.0	1	20.0	1	20.0
Nebraska	2	40.0	2	40.0	2	40.0	3	60.0	1	20.0	1	20.0	5	100.0	4	80.0	5	100.0	2	40.0	2	40.0
Nevada	1	100.0	1	100.0	-	-	1	100.0	1	100.0	-	-	1	100.0	-	-	1	100.0	-	-	-	-
New Hampshire	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	1	100.0	1	100.0	1	100.0
New Jersey	20	37.7	36	67.9	16	30.2	2	3.8	-	-	-	-	15	28.3	22	41.5	42	79.2	42	79.2	-	-
New Mexico	3	30.0	5	50.0	1	10.0	9	90.0	3	30.0	7	70.0	1	10.0	5	50.0	10	100.0	-	-	5	50.0
New York	29	76.3	34	89.5	23	60.5	33	86.8	28	73.7	18	47.4	33	86.8	34	89.5	38	100.0	37	97.4	28	73.7
North Carolina	18	24.3	52	70.3	30	40.5	65	87.8	20	27.0	30	40.5	23	31.1	21	28.4	73	98.6	11	14.9	-	-
North Dakota	1	25.0	1	25.0	-	-	-	-	-	-	-	-	2	50.0	4	100.0	4	100.0	4	100.0	4	100.0
Ohio	25	43.1	36	62.1	18	31.0	47	81.0	32	55.2	28	48.3	37	63.8	45	77.6	56	96.6	22	37.9	15	25.9
Oklahoma	8	27.6	12	41.4	2	6.9	26	89.7	16	55.2	22	75.9	13	44.8	9	31.0	29	100.0	1	3.4	1	3.4
Oregon	3	15.8	5	26.3	2	10.5	10	52.6	7	36.8	2	10.5	7	36.8	8	42.1	19	100.0	3	15.8	17	89.5
Pennsylvania	2	50.0	4	100.0	2	50.0	4	100.0	4	100.0	3	75.0	3	75.0	2	50.0	4	100.0	3	75.0	1	25.0
Rhode Island	-	-	5	100.0	1	20.0	4	80.0	1	20.0	2	40.0	1	20.0	3	60.0	5	100.0	5	100.0	4	80.0
South Carolina	4	11.4	16	45.7	4	11.4	16	45.7	10	28.6	11	31.4	15	42.9	22	62.9	35	100.0	10	28.6	5	14.3
South Dakota	1	50.0	1	50.0	-	-	1	50.0	1	50.0	1	50.0	2	100.0	2	100.0	2	100.0	1	50.0	2	100.0
Tennessee	10	16.4	36	59.0	6	9.8	43	70.5	9	14.8	14	23.0	10	16.4	10	16.4	58	95.1	2	3.3	6	9.8
Texas	16	34.0	25	53.2	13	27.7	38	80.9	21	44.7	20	42.6	24	51.1	19	40.4	47	100.0	4	8.5	9	19.1
Utah	5	83.3	2	33.3	1	16.7	2	33.3	2	33.3	1	16.7	2	33.3	1	16.7	6	100.0	2	33.3	-	-
Vermont*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Virginia	6	13.6	22	50.0	3	6.8	26	59.1	12	27.3	16	36.4	19	43.2	23	52.3	43	97.7	14	31.8	7	15.9
Washington	17	85.0	17	85.0	13	65.0	16	80.0	17	85.0	12	60.0	16	80.0	20	100.0	20	100.0	6	30.0	8	40.0
West Virginia	4	17.4	9	39.1	2	8.7	17	73.9	1	4.3	6	26.1	11	47.8	9	39.1	23	100.0	3	13.0	3	13.0
Wisconsin	13	92.9	14	100.0	12	85.7	13	92.9	10	71.4	9	64.3	13	92.9	14	100.0	14	100.0	12	85.7	7	50.0
Wyoming	-	-	-	-	-	-	-	-	-	-	-	-	1	100.0	1	100.0	1	100.0	-	-	-	-

* Vermont has no full-time health organizations rendering local health service.

SUMMARY

The ultimate goal of all public health officials is complete coverage of the entire nation by full-time local health organizations staffed and equipped to provide well-rounded public health services to all people. Extension of full-time organized public health services to all areas of the United States would necessitate the organization of additional units in many States as well as the extension of existing units to cover approximately 1,350 counties or a total population of between 35 and 40 million persons who are now without full-time local health services. Preferably, many of these units would be organized on a district rather than a single county basis, thereby combining resources and fully utilizing all available personnel. The needs of the community must necessarily dictate the pattern of health organization.

In addition to extending coverage to the remainder of the country, strengthening of existing health units so as to provide more adequate public health protection is also a primary need. If minimum public health needs of the entire country are to be met, staffs of currently organized health departments must be greatly increased. Study of the staffing situation in areas now covered by full-time health organizations rendering local service reveals that a very small percentage of these areas have sufficient employees to provide essential health services. Shortages in medical, nursing, and santation personnel are particularly critical. In addition, public health dentists, health educators, and nutritionists are needed in considerable number to carry out the accepted functions of a public health program.

When all the public health functions of official health agencies, official agencies other than health, and voluntary agencies are combined, a wide variety of health services are made available throughout the areas served by full-time health organizations. A great many more services could be provided if additional public health medical facilities were present. Facilities for adequate services in the newer health fields are particularly scattered. In a significant number of areas, the official health agency has not yet assumed responsibility for control activities, but participation in the community control program has been on a cooperative basis with other official agencies or voluntary agencies.

Number of Full-Time Health Units and Counties Served Thereby - June 30, 1949[1]

State	Total units	Counties covered	Single county units	Local health districts		State health districts (Actual service)		City units
				Units	Counties	Units	Counties	
Total	1,291	1,648[2]	673	278	695	67	271	273
Alabama	55	67	43	12	24	-	-	-
Arizona	6	6	6	-	-	-	-	-
Arkansas	27	65	8	17	57	-	-	2
California	49	38	33	2	4	-	-	14
Colorado	11	21	4	4	16	-	-	3
Connecticut	14	-	-	-	-	-	-	14
Delaware	4	3	-	-	-	3	3	1
District of Columbia	1	-	-	-	-	-	-	1
Florida	37	62	18	17	44	-	-	2
Georgia	51	88	28	22	60	-	-	1
Idaho	5	15	1	4	14	-	-	-
Illinois	40	102	10	5	12	13	80	12
Indiana	7	5	3	1	2	-	-	3
Iowa	2	2	2	-	-	-	-	-
Kansas	15	14	14	-	-	-	-	1
Kentucky	62	104	32	30	72	-	-	-
Louisiana	54	57	50	3	6	-	-	1
Maine	11	16	-	-	-	6	16	5
Maryland	24	23	23	-	-	-	-	1
Massachusetts	57	1	1	1	-[3]	-	-	55
Michigan	55	71	29	15	42	-	-	11
Minnesota	15	87	2	-	-	8	85	5
Mississippi	67	77	60	7	17	-	-	-
Missouri	25	21	21	-	-	-	-	4
Montana	5	5	5	-	-	-	-	-
Nebraska	5	6	4	-	-	1	2	-
Nevada	1	1	1	-	-	-	-	-
New Hampshire	6	-	-	-	-	-	-	6
New Jersey	52	1	-	14	1[3]	-	-	38
New Mexico	10	31	-	10	31	-	-	-
New York	38	62	11	-	-	16	46	11
North Carolina	74	99	50	19	49	-	-	5
North Dakota	4	17	-	3	17	-	-	1
Ohio	72	56	42	6	14	-	-	24
Oklahoma	29	40	19	8	21	-	-	2
Oregon	19	23	14	4	9	-	-	1
Pennsylvania	18	7	-	-	-	12	6[3]	6
Rhode Island	8	5	-	-	-	3	5	5
South Carolina	35	46	14	15	32	-	-	6
South Dakota	2	2	2	-	-	-	-	-
Tennessee	62	81	44	16	37	-	-	2
Texas	47	56	35	7	21	-	-	5
Utah	6	29	1	-	-	5	28	-
Vermont	-	-	-	-	-	-	-	-
Virginia	45	70	9	25	61[4]	-	-	11
Washington	21	24	14	5	10	-	-	2
West Virginia	23	38	16	6	22	-	-	1
Wisconsin	14	3	3	-	-	-	-	11
Wyoming	1	1	1	-	-	-	-	-

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[1] Based on data submitted for 1949 Revision of Directory of Full-Time Local Health Officers.

[2] Includes 9 complete counties which are served by city health departments, the counties being conterminous with the respective cities. The cities involved are: San Francisco, Denver, New Orleans, New York (5 counties), and Philadelphia.

[3] Counties only partly covered not included.

[4] In addition to the 61 counties, these districts include the independent cities of Bristol, Buena Vista, Fredericksburg, and Radford.

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